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# THE MARYLAND FARMER:

DEVOTED TO

Agriculture, Horticulture, and Rural Economy.

VOL. 8.

BALTIMORE, NOVEMBER, 1871.

No. 11.

## THE APPLE IN MARYLAND.

In a recent number of the *Farmer* we expressed the opinion that the apple tree would grow as vigorously, and bear as well, in the State of Maryland as in the States further north. We held then, as we hold now, that our orchards have been too much neglected. We have depended of late years to a large extent upon the neighboring States for our fruit of this class, and have allowed our own trees in the meantime to deteriorate, and become scaly and stunted for the want of care. We are confident that in Maryland apple orchards of well selected fruit, could be brought into favorable competition with the fruit of other States. As the condition of our orchards remains however at present, we confess that we envy New York and Pennsylvania their trees bending beneath the weight of sound apples, in row after row, of which we can scarcely see a speck or a blemish on the surface of the fruit. Seeing this as a result of the culture there we look for the cause of it. We find the tree attended with assiduous care. The kind of apple most suitable to soil and locality is selected with much thought, and after much consultation, and the picking and assorting for sale is so judiciously managed that the fruit is in nowise injured, but keeps secure, and presents an attractive appearance when brought to market.

Our soil and climate are as good as those of the States to the north of us. There is no other way to account for the superior quality of the northern apples than the care and attention given to their culture by the growers. They use lime and ashes freely in their orchards, and especially about the roots of the trees, they prune carefully, they cleanse the trunks of the trees, they keep down the bug and the caterpillar, and they loosen and aerate the soil, using at intervals of a year or two manure and bones liberally. As with the apple so with the

grape. We ought certainly be able to raise both successfully in our fair climate and with our late open autumns—yet where are most of the grapes grown which are sold in our markets? They come from New York and Pennsylvania. We quite agree with Mr. J. H. Mittnacht, in our September number, who writing from Put-in-Bay says: "Grapes raised here are mostly Catawbias, also a great many Delawares. Taking all in all, I would not exchange one acre of my vineyard (in Maryland,) for two acres up here. I still insist that Maryland is one of the best grape-growing States. We have hardly ever too much rain in the season, and the temperature is more even, and the season is longer, than in any of the western grape-growing States. We must only find out the sorts best suited to our climate, land and situation."

With equal justice we may say the same of the apple. We have the climate and the soil adapted to apple culture, but the old favorite sorts, the Rambos, the Golden Pippins, and the famous cider apple the old Redstreak, have died out and new kinds must be judiciously chosen to take their places.—We remember years ago that the late Mr. Samuel Feast gave a list of apples best adapted to this State, which list will doubtless be found among the volumes of the old *American Farmer*. But other sorts have come in since, and we must choose not simply the latest but also the best of these, for there is a fashion in fruit as in many other things.

There is however, another question to be answered, and that is, "Will the cultivation of the apple here in Maryland pay, so long as there comes from the North such an abundance of fruit as to keep the price down to a comparatively low limit?" The question, in our opinion, answers itself. If the Northern grower can pay for packing, freight, and the services of the middleman and still make a fair profit, it would speak but poorly for our own enterprise to say that we on the spot, and with our mar-

kets close at hand, would not be able to compete with them.

There is nothing, then, to prevent apple culture being quite as remunerative in Maryland as at the north—assuming that the trees will grow and the fruit mature as well. On this latter point we are glad to find a confirmation of our views in an article by Mr. F. K. Pheonix, an experienced pomologist of Illinois. He has tried both the northern and the southern sections of our country, and he gives it as his decided opinion that it is a mistake to suppose that trees grown north of a given point are necessarily and permanently more hardy than those grown south of it. He adds:

"If this be so, it must be in two or one of two respects. The varieties grown must be hardier, or the growth and substance of the trees themselves must be tougher and more enduring. The former is wholly accidental, and hence scarcely worth noticing, because nobody pretends to deny that the hardy northern varieties if included in a southern collection, will grow as well as at the North. The only point would be whether they were to be found in any given collection. Is then, the growth and substance of a northern tree hardier and more enduring? That it is so, will be urged, because, first, the growth is slower. Second, that as nature fits the growth and tissues of every tree, during the growing season for the coming winter, and as a northern winter is more severe, therefore the growth would be hardier in exactly the same ratio. To the first argument it may be replied that the southern growth is not always faster, except as the season is longer, or if it be really more vigorous it is also more mature. In many instances southern trees, while young, are not killed back or made black-hearted by the severity of the cold. No one conversant with the facts on this point will deny this. Hence, if it be an object to plant perfectly sound trees, they are more certain to be found South than North. Having superior, or any equal soundness, would they be likely to maintain it when transplanted North? If of usually hardy sorts and form (low headed), they would, and by the very law stated in the second argument, by us conceded—Transplanted in the spring, by the next fall they would be adapted to their new home, and become to all intents northern."

AN editor who doesn't know much about farming suggests that for garden making, a cast-iron back with a hinge in it would be an improvement on the spinal column now in use.—*Exchange.*

That editor ought to have a patent.—*Scientific American.*

That patent would be well adapted to *thinning* corn—people that know something about farming, "know how it is themselves."

INDIANA dogs have carried sheep stealing to such an extent that the legislature has offered a bounty on every dog-skin produced, and the honest farmers now find puppies the most profitable crop they can raise.

## THE CARE OF FARM STOCK.

As winter is approaching, we desire to say a few words to our farmers in regard to the careful housing of their stock. Any reasonable expense that may be incurred in affording the cattle additional warmth, will be more than repaid in the satisfaction of seeing them comfortable, with sleek coats and bright, healthy eyes, whilst by the smaller quantity consumed, the cost of keeping the stock through the winter will be greatly lessened. It is well known to many farmers of experience, that if no shelter is given, or if the sheds and stabling are open and cold, the stock will be compelled to draw upon the fat accumulated during the summer and autumn, and as this is exhausted the vital heat is lessened. Warmth, in point of fact, is equivalent to additional food. If the warmth is not given by the temperature in which the animals are kept, it must be supplied by the food they eat. If they suffer from cold, or insufficient food, they come out in the spring in such poor condition that a considerable part of the season is lost before they recover their proper condition. Feeding during the winter liberally with heat-producing food, such as oil cake, brewers' grains and Indian corn, though it will turn out the stock in good condition at the close of the winter, even in spite of poor accommodations, is too costly a process to be advantageously adopted. It is what, however, many feel obliged to do in consequence of the exposure to which their stock is subjected.

We propose to consider briefly the effects of temperature on cattle, from experiments that have been made. In one experiment it was found that ten days' feeding at forty-one degrees of the temperature produced a loss in weight, in two cows, of twenty-two pounds. Ten days' similar feeding at fifty-six degrees showed an increase in weight of thirty-five pounds. Ten days' similar feeding at fifty-nine degrees showed a loss of six pounds, and ten days at sixty-five degrees a loss of thirty-three pounds. From the above experiments it will be observed that extremes of heat or cold produced the same results. In both instances there was a loss of flesh. But at the moderate temperature of fifty-six degrees the cows improved in flesh greatly. The following experiment practically demonstrates the correctness of the position we have taken:

"An experiment made by Lord Ducie shows that one hundred sheep were fed, in a shed, twenty pounds of Swedish turnips each per day; another hundred in the open air or field were fed twenty-five pounds each; and yet the former, on one-fifth less food, at the end of a few weeks, had gained three pounds each more than the others.

"Five sheep were fed in the open air between the 21st of November and the 1st of December, consuming ninety pounds of food per day, the tem-



perature being at forty-four degrees. At the end of this time they weighed two pounds less than when at first exposed. Five sheep were then placed under a shed, in a temperature of forty-nine degrees. At first they consumed eighty-two pounds of food per day, then seventy pounds; and at the end of the time they had gained twenty-three pounds. Again, five sheep were placed in a shed as before, and not allowed to take any exercise. They ate at first sixty-four pounds a day, then fifty-eight pounds, and increased in weight thirty pounds.

"Mr. Johnston, of New York State, is enabled to keep his cows in milk during the whole winter on good, sweet hay, without the addition of other food, by attending to the warmth of the stable. And this warmth should never go below forty-five degrees, if possible. At forty degrees the coats of animals will begin to get rough and staring; at fifty they will become sleek and soft. Animals confined in a warm and moderately dark stable will thrive on the least food, and those running at large and exposed to the inclemencies of the weather will consume the most. However plenty and cheap the forage, it will always pay to provide shelter, at least from the storm and winds, for your stock in winter."

We have not made these remarks because we think they are generally needed in Maryland. Most of our farmers provide some shelter for their stock, however rough it may be. But very few are aware, even among those who are most considerate, that a high temperature is quite as injurious as a low one. For cows, the best temperature appears to be that which ranges from forty-five to fifty-five degrees, and for sheep from forty-five to fifty degrees. Careful observation will undoubtedly confirm the truth of the views we have taken, based as they are upon experimental tests, and will also show how great the loss must be, even in an economical sense, to those who negligently expose their cattle to the inclemencies of the winter.

**TO KEEP MEAT FRESH.**—The following from the *Rural American*, will be useful to farmers who are at a distance from meat markets: Cut the meat in slices ready to fry. Pack it in a jar in layers, sprinkling with salt and pepper, just enough to make it palatable. Place on the top a thick paper or cloth, with salt half an inch thick. Keep this on all the while. Meat has been kept perfectly good for three weeks in summer by this method.

**SOOT AS A MANURE.**—One of the best fertilizers going constantly to waste, is soot. It is as valuable as guano, and should be carefully saved at least twice a year. You will find soot contains a large amount of ammonia, and on this account is very beneficial to nearly all kinds of plants. Apply it to the soil about the roots, and not to the leaves or stems; or, twelve quarts of soot dissolved in a hogshead of water makes an excellent liquid manure.

## Garden Work for November.

There is but little now to be done in the garden beyond clearing off beds, manuring, and on stiff garden soils digging up the beds and leaving them rough, to be ameliorated by the winter frosts. The following work may, however, claim attention:

**Cabbage.**—These should now be taken up and stored away. A good plan is to take them up, roots and all, and bed them closely together; cover lightly the heads with straw, and protect the whole with a low framework not more than two feet high, formed of forked sticks and cross-pieces, the sills of the frame being shut in by thick layers of corn-stalks, and the top covering with a heavy thatching of the same.

**Lettuce Plants.**—Plants in cold frames should have the air admitted to them regularly in moderate weather. Plants in the open air should now have the protection of a light covering of straw and brush.

**Sea Kale and Rhubarb.**—The seeds of these may yet be sown, if the frost permits, but the earlier it is done the better.

**Turnips, Carrots, Parsnips, &c.**—All esculent roots now remaining in the garden should be taken up at once, left to dry off the superfluous moisture for a few hours, and then carefully stored away in a dry cellar, or in heaps in the garden, protected by a heavy covering of straw, and upon this at least a foot of earth in thickness.

**Cauliflower Broccoli.**—Break down the leaves of these over the flowers to protect them.

**Cardons, Endive, Celery.**—Continue to blanch these.

**Small Salading.**—If small salading is still to be sown, it can only now be done in a hot-bed.

**Spinach.**—Keep the spinach free of weeds, and if the plants require thinning out, take care to leave the finest standing at about four inches apart.

**Asparagus Beds.**—If these have not been cleaned off and top-dressed for the winter, let the work be done at once.

**Gooseberries, Currants, &c.**—Cuttings of these fine small fruits may be set out during this month, although it would have been better to have had it done earlier.

**Raspberries.**—New plantations of raspberries may be set out if the weather continues open.

**Trenching Stiff Clays.**—Any clay soil in the garden will be greatly benefitted by trenching and leaving the soil rough for the winter. It would, however, be much better to cart on a few loads of sand and mix with the clay, to render it more porous and friable. In any case use manure liberally.

## Our Agricultural Calendar.

### FARM WORK FOR NOVEMBER.

We are now entering upon the days of comparative leisure. We do not say that there is at any time a cessation of work on any well conducted farm; but the great press and strain of agricultural labor is over, until the opening of spring calls for a renewal of the old energy, and a resort to all those appliances which at the planting season, as also during the season of ingathering, tax the judgment of the farmer, and hasten the work he has to do. In November, the month of odd jobs, rather than of steady and continuous labor, the farm duties consist largely in collecting and storing away the crops of the season, in husking corn, in getting wood for fuel and fencing, and in general preparation for the winter, which will so soon set in. One principal duty is the caring for, and comfortable housing of the stock. Experience has proven over and over again that stock well sheltered can not only be kept more economically, but that they come out in the spring in better condition than stock kept on an increase of food, but exposed to the inclemency of the weather. The very rudest sort of protection is better than none; but where good shedding can be provided, the advantage of it where a fair quantity of stock is kept will soon repay the cost of construction. The work for the month is as follows:

#### Composts for Manures.

We have so often called attention to the preparation of compost heaps throughout the open weather of the autumn and winter, that it is but repeating enjoin advice to say that success in this matter is a fair test of the intelligence of the farmer. The compost heap is, an old writer has very justly said of the manure heap, "the farmer's bank." Properly made it adds vastly to the amount of fertilizing material at his disposal, and in using up in its construction a large proportion of the manure in the barn-yard, it prevents the manure from becoming "fire fanged," as is so often the case when pure manure heaps are made. It also preserves the manure from waste and loss by evaporation and exposure to the elements. The construction of a compost heap is very simple. As best composed it should consist of one part barn-yard manure to two or three parts rough fibrous material of any sort—carried up in alternate layers of manure and rough stuff, the thickest layers of both being at the bottom of the heap, and gradually lessening in thickness as the heap increases in height. When the heap is completed, with the sides drawn in a little as it rises, holes should be made with a sharpened pole or crow-bar, from the top downwards, and the heap

well saturated with the black water of the barn-yard. This process may be repeated during the period of open weather, so that the entire heap may be moistened thoroughly. A coating of rich earth over the top will then be advisable, and in due season fermentation will set in. We need not say that if to the scrapings of ditches, wood's earth mixed with forest leaves, old turf of headlands, waste straw, &c. that make up the bulk of the raw material to be composted, wood ashes be added, it will increase very materially the agricultural value of the compost.

#### Fattening Hogs.

Decidedly the most economical manner of fattening hogs is to feed them well before the severe cold weather sets in, as they fatten more readily, and require a less amount of food to produce a pound of flesh. We say, then, commence to fatten early. Put the hogs in their pens as soon as the supply of acorns begins to fail, and feed them regularly with all the food they can eat, but not to that excess which leads to waste. The best way is to feed a little at a time and often, and keep their sleeping apartments warm and dry, and fill the pen with litter, to be worked up into manure, changing the litter as frequently as may be found necessary.

#### Ploughing Stiff Clays.

On all farms where any of the fields have a stiff clay soil, and they are to be brought under cultivation the following spring, it is decidedly advisable to break them up in the autumn, and let the land lie in furrows, to be broken down and disintegrated by the winter frosts. The land will then turn out mellow in the spring, and the solubility of the fertilizing ingredients in the soil will be greatly increased. But no clay soil should be ploughed in a wet state, and no sandy soil should be ploughed at all if the raw soil is to be left exposed through the winter.

#### Storing Roots.

Now is the time to store away roots. Collect them carefully, see that they are not bruised in the handling, and put them away in a dry but moderately cool place, where the frost cannot reach them.

#### Corn Stalks.

If these are used for rough fodder the best way to feed them is to chop the stalks in a cutting box, and mix with the chop a small quantity of corn meal or brown stuff. Moisten the chaff to make the meal or brown stuff adhere, and mix thoroughly with a shovel and a stout short stick.

#### Milk Cows.

These ought to be warmly housed, and well fed through the winter, if they are expected to keep up a fair supply of milk. Fed on dry provender they will soon fall off in their milk, and the milk-giving



Properties of the cow is to a certain extent injured. In addition to dry food, whether in a long state or chaffed, cows should have occasional messes of slops, and a regular supply of roots, such as mangold wurtzel, sugar beet, carrots, and, more sparingly, of turnips. The best roots are sugar beets and carrots, and with these and a good supply of chaffed hay, a fodder mixed with bran, the supply of milk will be kept up, and the health of the cow well maintained. They should of course be allowed a brief airing in moderate weather, have access to pure water, and a regular supply of salt.

#### Young Cattle.

If any farmer wishes to stunt his young cattle he has only to turn them adrift, exposed to wintry winds, and feed them on dry, rough fodder. But if he wants them of thrifty and vigorous growth, and to turn out well and hearty in the spring, he must house and feed them with a fair supply of good food, but not so much as to make them gross and feverish. Good sheds, good beds, good water, chopped food mixed with a little bran, an occasional mess of cut roots, and an airing in mild weather, will keep the young stock in growing condition, and in perfect health.

#### Working Animals.

These also should be well treated. Fed less, indeed, in the stall than when at hard work, but supplied regularly with good nutritious food. Horses so kept are all the better for an occasional supply of carrots cut up, and should be exercised carefully at times after long standing in the stalls.

#### Sheep.

See that these have all the attention they require. To keep them well they should be housed in close sheds during the winter, the floors being strewed with straw or litter, frequently renewed, and occasionally sprinkled with plaster. Round the sheds feed boxes should be arranged, which should be regularly filled with hay or straw, and at intervals a small supply of grain should be furnished. There should also be a yard with a southern exposure for exercise, and rock salt should be kept for their use in boxes easy of access.

#### Granaries and Corn Houses.

If these have not been cleansed and purified, see that the work is done at once.

#### Draining Wet Lands.

There is no more useful work to be done on a farm than that of draining moist or springy lands. It promotes health, and it improves the quality and the yield of the crops, whether of grass or grain. It is a work which can often be done more conveniently at this season than at any other, and ought to be done at the very first opportunity.

#### Gearing, Farm Implements, &c.

See that these are carefully examined and repaired. The leather should be oiled, and such implements and machinery, as well as the wagons, carts, &c., should be thoroughly renewed in such parts as are weak or broken, and a good coat of paint would add greatly to the preservation of the wood work.

#### Firewood.

See that a full supply of firewood is gotten in and put under cover for winter use.

#### Fences and Gates.

Examine and repair these, and make new ones wherever required.

#### Outhouses and Cellars.

Cleanse, purify and whitewash these as early as possible.

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**ABSORBENT POWERS OF MELLOW SOIL.**—Experiments have shown that a mellow, loamy soil is capable of absorbing in twelve hours, when exposed to a moist atmosphere, an amount of water equal to two per cent. of its weight. This property possessed by a mellow soil is one that in a dry season is able to give it the power of maturing a crop, when a hardened surface would be unable to do so. A surface that is impenetrable to the atmosphere of course could not absorb any of the moisture with which the atmosphere is charged. But when rendered free from lumps by repeated plowings and harrowings, each change of temperature causes a circulation of air throughout the mass of soil, which is free then to absorb all the moisture coming in contact with it until saturated.—*Hearth and Home.*

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**USE OF NITRATES.**—If any of the readers of the *Country Gentleman* wish to try the effect of nitrate of soda or the nitrate of potash on their clover, &c., let them sow it on just as the effect of spring begins to show itself, at the rate of  $1\frac{1}{2}$  cwt. per acre. A sprinkling of nitrate on Asparagus beds is very beneficial. Also about half a pound to the bush on gooseberry and currant bushes where they are not very healthy, will assist them amazingly.—*Cor. Country Gentleman.*

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A curious observer states that the California ant-eating woodpecker, in storing its provisions for winter use, digs a small round hole in the bark of the pine or oak, and into these inserts an acorn so tightly wedged in as to be with difficulty extracted. The bark of the pine tree, when thus filled, presents at a short distance the appearance of being studded with brass-headed nails. Stowed away in large quantities in this manner, the acorns not only supply the wants of the woodpecker, but the squirrels, mice and jays avail themselves likewise of the fruits of provident labor,

## NOTES AND COMMENTARIES.

BY PATUXENT PLANTER.

During the past year I made some trials of different garden seeds, and now report my experience. It is to be recollected my soil is very rich and light, almost sandy; and the season was too wet in the early part and too dry in the latter. The Gen. Grant tomato is large, productive, but coarse and hollow. The *Trophy* is wonderful?—delicious, early, large, beautiful, thin-skinned, and full of pulpy meat as an egg. To cut slices from a two lb. round, smooth, red and luscious tomato makes one's mouth water, and his reason admits it is the perfection of that wonderful fruit, or *vegetable*, which?

**Corn.**

On the 25th of April I planted Sandford, Excelsior, Sugar, Asylum, and Narragansett Early. On the 20th of July, eighty-six days, I had roasting ears. The Excelsior was best, though there was only a few days difference in the ripening. The Sandford proved good corn for the table, makes fine meal and best of hominy. On the 29th of June I planted one hundred day *Dent* corn, and eat from it roasting ears on the 18th of August, only fifty days. I have from a limited trial no doubt this is the most valuable corn we have ever had introduced in our section. Its yield must under favorable circumstances be enormous. The color (yellow) being its only objection. It bears close planting, and will mature perfectly if planted as late as the 10th of July. Our crop of white corn planted early would be past working, when we could plant this and make a full, matured crop. What a saving of labor to the man with a small force? or rather what a convenience by way of dividing the labor, and relief from great pressure at a critical period of the corn crop. By planting this corn the same force could make as it were two crops of corn, one not in the least interfering with the other, except in the first plowing of the field, which could be done when it was too wet to work the growing crop of white corn.

Again, the field intended for yellow 100 day *Dent* corn could be pastured up to the 1st of July, which would relieve the other pasture fields. Query—might not a farmer purchase a flock of sheep in autumn, raise his lambs, and sell ewes and lambs together, after being pastured on the field, break it up, and raise a crop of *Dent* corn the same season? I am sure this can be done; say a lot of fifty acres of clover, suffered to get well up, would fatten fifty ewes and their lambs, and from their droppings become enriched enough to produce ten barrels of *Dent* corn, producing sufficient nice fodder to keep fifty more sheep the following winter. Thus a

gross income of \$50 or \$60 per acre could be realized.

How strange it is our farmers do not sow turnips among their corn in its last working or soon after, when rain is coming or has come, and cover the seed with small harrows with wooden teeth. I have seen fine crops grown in that way—and then a lot of wethers purchased and turned on the turnips and fodder, with salt at their command, and a little oil-cake and bran with oats, would pay well in fat winter mutton, besides manuring the ground for oats or other spring crops. I believe in this way, five sheep to the acre would enable the land to bring heavy crops of corn or grain, year after year for many years.

**Peas.**

On the 23d of March I sowed Tom Thumb, Carter's First crop, McLean's Premier, and his Epicurean, and his Princess Royal, rather late but very fine. Laxton's Alpha is very early, productive and delicious, decidedly the finest of all new varieties of early sort. It grows tall, eatable on 26th of May, came in with Carter's First crop—both one week before Thom Thumb. The two last named are not very prolific. Of the later kinds the Dwarf Excelsior Marrow Peas, and Dwarf Mammoth Marrow are the best, requiring no sticks. With these two last, Tom Thumb and McLean's "Premier," a succession may be had without the use of sticks, which is a great saving of labor and time. Were I to name those that would give the most satisfaction in every way to a private family, I would say, Tom Thumb, Laxton's Alpha, Mammoth Marrow, and Champion of England. They are all productive, large size, rich and marrowy, and follow each other in succession if planted on same day. The Alpha is a very valuable accession and a wonderful bearer. Among the new introductions of garden vegetables, the black Egyptian beet takes a first rank. It is very early, large, splendid color, and very tender and fine flavor. All the new sorts of early cabbage I have found to be little less than humbugs. The old Early York and the Minningstadt stand unrivalled for spring and summer cabbage.

**Coming Prices of Grain.**

It is gratifying to feel sure that farmers will, or ought to, receive this winter a fair remunerative price for their grain. Everything gives assurance of high rates. The corn crop in this county is short, particularly so in the large corn producing sections, while the hay and potato crop is very short, with an increased amount of hogs and cattle that must be grain fed, to bring them up to a living price at the shambles—the grass crop having been a failure, more grain must be fed. In Europe, owing to many reasons, there will be great scarcity of breadstuffs, and a corresponding demand on this country to



supply the deficiency. The *Mark Lane Express* sounds the alarm of a possibility of a famine similar to that of 1847. Some of our best informed journals say that the export demand for wheat, corn and flour must advance the price of those articles not less than twenty per cent. They further warn the farmers against a conspiracy to keep down the prices, notwithstanding the daily advance in Liverpool and other European markets. Producers should look to this and hold out for corresponding advances in prices here as in Europe. They should keep their corn and wheat in their granaries until the prices reach a proper scale of profit to remunerate them for their toil, and the burthens under which they have labored for years past.

Our importers will find it to their interest to send grain instead of gold to Europe. A one thousand dollars in greenbacks laid out in grain will buy more goods than that sum exchanged for gold would purchase. Owing to the short crop, grain is better than gold. No pr fit is made by sending gold to England, but currency invested here in grain will yield a handsome profit in gold or its equivalent there. It is in the power of commission merchants, seeing this state of things, to raise the prices, and as they ought to be more deeply interested for the farmer than for the buyer, they should by concert of action keep our market up with the demands of the markets of the world. God forbid there should be a necessity for famine-prices for breadstuffs, but when there is a great demand, I can see no reason why our oppressed workers of land should not reap some corresponding benefit after having in years of plenty, had to labor hard and sell their products at ruinously low rates, paying at the same time for all the necessities of life which they required, enormous prices, because of taxes and tariff duties, imposed to sustain the credit of the Government, as is said, but really to swell the coffers of manufacturers and bloated corporations. How long, oh! how long, before the great mass of our honest, hard working rural population will band together and rise up in their might and power, demand and triumphantly obtain their just rights;—an equal share of the blessings and benefits of government, and no longer be the sole bearers of all the burthen, mere “hewers of wood and drawers of water,”—the slaves to the few protected millionaires and corporations—the humble laborers who are taxed to pay high interest to Bond holders that pay no taxes. A poor farmer with a large family who owns \$10,000 worth of property, pays an annual tax of not less than \$100, besides a tax on every implement and article that he has to make his living with, while a lordling worth \$100,000 in National Bonds is exempted from all tax, and receives his interest in gold. Is this equality, equity,

justice or honesty? Besides, the farmer is cheated out of half he makes by combinations, “rings,” middlemen conspiracies, and a thousand other ways, the secret machinery of which is invented and kept working for his ruin by the crafty and designing who “toil not, neither do they spin,” unless they spin, like spiders, webs to catch the foolish farmer fly. But the truth is, buyers know that the farmers are so hampered they are bound to sell their crops at any price as soon as ready for market. Once was the time the Banks could and would loan the planter and farmer, thus enabling them to hold on to their crops until the buyers had to give a fair price, but now the Banks are little more than large shaving shops, under the control of merchants, and wealthy speculators, who make fortunes out of the necessities of their fellow beings.

#### Corn Fodder.

In view of the great scarcity of hay, and the extraordinary high price it brings, the farmers will pardon me for suggesting the importance of taking unusual pains in securing their corn fodder and using it economically, so as to save for sale the more hay. Those who live convenient to towns or close to railroads will this year reap a rich reward by bailing their hay and straw; the latter, if clean and bright, is worth more than the grain it bore. Hay will be worth \$40 to \$50 per ton, and straw at least \$20. For domestic purposes, sound corn fodder, especially if cut up fine and moistened, and sprinkled with a small amount of bran and corn meal, is capital feed for cattle and horses, and thus nearly all the hay and straw could be sold at high prices, while it would not be missed by the stock, and the saving in grain as fed in the usual way would well repay the extra labor expended in the preparation of the corn fodder. As soon as the corn is husked the stalks with the fodder and shucks should be put under cover, or ricked dry, and thus kept from the wet and prevented from moulding. The cut fodder steamed would perhaps be better, as it would soften the larger and coarser parts of the stalk. But if steamed, that given to horses ought not to be allowed to get sour, as it might be for hogs and cattle, though for the latter it would be better to have it fresh and sweet, even warm from the steamer. There is much money in our corn crop which is lost entirely by all farmers. Properly managed, the fodder is more valuable than the grain. The tops and blades are worth as much as hay—the stalks and cobs broken and ground and steamed, furnish good food for hogs and cattle—the shucks, neatly saved and bailed, sell very high for making paper and mattresses, horse collars and stuffing for seats, and bottoms for chairs and lounges, instead of cane or rush or oak strips. All this can be easily accomplished by machinery, with little manual labor or time, and during bad weather under cover of the barn. It only wants a little care and trouble and determination, to secure fourfold from the corn crop what it yields the grower now, under our present slovenly and wasteful system of management of that inestimably valuable crop.

JAKOBB DUNK PAPERS  
ON  
FACTS, FILOSOPHY AND FARMIN.

PAPER NUMBER II.

ON THE DOG TAX.

We had been at work some time endeavoring to organize the agricultural element of the county for its own improvement and security from fraud. The *Purland Ringpiece* had come out with several articles, written by some of the warmest friends of agricultural organization, and public sentiment was getting excited about the great things that were to be accomplished by the movement, in the way of stopping frauds in fertilizers, raising the price of wheat, taxing dogs, reducing wages, (for public sentiment ran wild in this matter, as you may have noticed, it sometimes does on great questions,) and other things "too tedious to mention." The *Ringpiece* came out in a call for a "mass meeting of all friends of justice to the farmer," which was largely attended by farmers from all parts of Purland county, who debated the public road question, the fertilizer question, a new turnpike law, and finally adjourned, with a call to the people to "meet at the usual voting places in their respective districts and select delegates to represent them in a county convention, for the purpose of discussing and taking action upon the important questions affecting the interests of the agricultural community." Anxious to secure a full representation and a large attendance at the meeting, and also to prepare the public mind for the discussion of the questions at issue, I thought I would call upon Mr. Dunk some time as I was passing, and break the ice with him. One day I hitched outside, got over the bars, and was passing up the lane to the house, when a small dog came rushing down towards me with a "tear you alive" gait, barking and howling as if the safety of empires was hanging on his yelp. I admonished him (or her, I don't know which,) with so strong an argument of his danger that he applied the brakes within a yard of me, but his efforts had called forth another larger dog, who bounded down the lane as if bent on a mince meat expedition, using a voice fully suited to the importance of the occasion. It was two against one, but I kept them at bay. In the meantime, a small child had ran out of the house to "see what was the matter:" he "seen" the situation with unusual precocity, and ran in again, appearing in a few moments with the whole family, Jakobb Dunk and Pipe included, who began a vigorous bombardment of the dogs with shouts, sticks and stones, to drive them away.

I entered the house with a "Good morning, Mr. Dunks," and looked around. It was one of the

"good old" houses; the "good old" log chimney was in its place, and the "good old" tin bucket stood handy, with water in it to put out the "good old" log fire whenever its encroachments upon the congenial material in the chimney imperiled the safety of the establishment.

"Mornin' Joodge," replied Mr. Dunks, "take a cheer."

"Fine weather, Mr. Dunk?"

"Elegant."

"I've called to ventilate that matter about the combination of the farmers; I suppose you read about it in the paper?"

"No, I didn't read about it; I did heer the folks a talking sumthin' about it at the codge."

The "codge" was the store, post office, grog shop, loafing mill, news distributor, etc., etc., &c., of the community.

"You take the paper, I suppose?"

"No, I don't take no paper"

"Well, I suppose you will pull with us in the matter; you know it's a thing in which we must all act together to do anything."

"I suppose so," replied Mr. Dunk very offish, but getting a little interested, "but what you goin' to do?"

"We ought to take some action about our roads, ought we not?"

"Roads is bad, that's a fact; I broke down the other day goin' to the Landin' by runnin' over a big rock rite into the road," and Jakobb then went on to relate all his own break downs, and all his neighbors for years back, without stint or limit. I saw I was gaining ground. "And if we can get together," I continued, "perhaps we can agree upon some plan for their effective repair; then we want to settle this fertilizer business definitely, if possible. The fertilizer men have been gouging us"—

"Exactly," interrupted Jakobb, "that's jes wot I was a tellin' 'em at the codge. You know that lower medder of mine, I put twenty-seven hundred pounds of the Oranggooler Equinoxial Company's Superphosphate on that patch," and Jakobb had an almost interminable tale about his ruinous losses from the supposed frauds in fertilizers. He closed his remarks with the usual statement, "and I never seen a bit of good from that day to this." Let me say in passing that I used the same guano the same year Jakobb did, and I got a good crop from it. He plowed his land late, worked it wet, left his guano out in the weather, half put his crop in, and late at that, and then the old cry, "the stuff is a humbug,"—but I didn't tell him all that. Here was another point gained.

"Then we want a tax on dogs to enable us to go into the wool and mutton business more largely."



"A wot?" said Jakobb.

"A dog tax. It don't pay to plow up so much land, and we could pasture off a good deal of old stuff by sheep, but dogs ought to be taxed to save the sheep."

"I don't know about *that*," said Jakobb, with emphasis; "we was a talking over that matter."

"Who's 'we'?" I asked.

"Folks up at the store," replied Jakobb; "my opinion about taxin' dogs is, you might as well tax cats," and Jakobb glanced around with a look which said, "that ends *that* argument."

"But, Mr. Dunk," I replied, "cats have no commercial value; they earn their food by destroying our enemies, and when they're too numerous a visit to the duck pond restores the equilibrium; but we tax horses, cows, hogs, sheep, and even chickens, and why not dogs, which have grown so numerous they completely prohibit sheep raising in some sections?"

"This ain't no country for sheep, no how," said Jakobb; "there's only a few here 'cause they don't do well."

"The difficulty, Mr. Dunk, is not in the climate, nor in the sheep, nor the feed we have for them. Actual experiment has demonstrated that sheep will eat a greater variety of plants than any other domestic animal, and the cleared appearance of our fields after sheep have been on them proves this. They will eat nearly all the growth of our pastures. No briars will survive them; they will kill the sassafras sprouts, and whilst they repay good attention, if the object is simply to winter them, and get rid of rough feed, they will do well on cornfodder and oat straw; and the rag weed, which grows so luxuriantly on our wheat fields, will make good feed for them if cut, cured and saved properly."

"You'll drive all the good dog stock out of the county, 'cause people won't keep no dogs if they're got to pay fur 'em, and wuthless stock'll be left around without owners."

"Does taxing imported horses or improved bulls, or blooded sheep, or hogs, or even chickens, drive them away or prevent their increase? On the contrary, when farmers find out that it costs more, in proportion to revenue, to keep a poor animal than a good one, with only a portion of the profit derived from improved stock, they will begin to improve their breeds of animals. Some of our best writers are actually suggesting a tax on scrub stock, to get rid of it, as only good stock can survive a tax — And what we want in dogs, as in all our animals, is the best breeds. In the sheep-raising districts of England the services of a good dog are considered greater in value than those of a stout boy. By proper training the shepherd dog has become, in fact,

indispensable. The setter, pointer, bull, terrier, New Foundland, hound, and other varieties, have also attained a high degree of intelligence and culture, and why should we not make use of this improvement in dogs as well as in other farm animals? The dog is susceptible of a high degree of improvement. He has followed his master by sea and land, his faithful friend and protector by night and by day, and has finally gone to his grave with a sorrow for his loss that would not be comforted. Now, how many of the curs in Purland would do that?

"Again, it costs several millions of dollars to feed the dogs in this country every year."

"That there dog don't cost me only a few meat and fish bones, and a chunk of grub onct in a while," said Jakobb. Now, that same dog was on the "suspected" list of sheep-runners.

"But put it all together, Mr. Dunk, for a year, and count the cost," I replied.

"Aint it 'all cry and little wool,' Joodge?" returned Jakobb, enlivening the subject with a flow of wit.

"It's precious little wool for the sheep raisers," I answered, with a sigh, as I thought of the fate of my Southdowns. "Dr. Johnson has a large farm, and he told me he would like to go into sheep-raising, but was afraid of dogs, and you know that neighbor Henson is obliged to yard all his sheep every night. The circular I sent out for the Department of Agriculture to one of the reporters, requesting an account of details of flocks, showing the comparative merit of different breeds, was returned to me with this comment, 'the dogs have saved me the trouble of giving any personal experiences.'"

"Well," said Jakobb, "I don't keep no sheep, and them that does should count the cost 'fore they go into it, and not turn things upside down for their advantage."

"That's just what we want to do, 'count the cost;' it costs fifty millions of dollars every year to feed dogs, now, what is there to show for it? The direct loss for one year in sheep is estimated at nearly three millions of dollars; in 1868, one hundred and thirty thousand sheep were killed by dogs; and if we take the years from 1840 to 1880, and the evil remains unchecked, the direct loss will be some seventy-five millions of dollars. The indirect loss to the commercial and manufacturing interests, and through them to the country at large, of course we cannot estimate, but it stands on the debit side of the account as a large item against the canine race, and Maryland regularly contributes her share to these immense losses."

"But, Joodge, we'd be over-run with minks, rabbits, weasels, squirrels, foxes, and sich like vermin, if we had no dogs."



"Not a bit of it; the tax would bring in good stocks, whose intelligence would enable them to hunt more game, and destroy more vermin by odds than the clumsy-legged, thick-brained, yelping, starveling hybrid, sheep-killing curs we've got around us at this present time. There are about seven million dogs in the country, of which number we could dispense with just half to our infinite profit."

"Fact of it is, Joodge, we're got too many taxes now," said Jakobb, "wot with fertilizer bills, and taxes, and interest, we don't have nothin' left."

"Taxes are high, too high; but this induces me to ask you the value of that heifer you had to kill last spring on account of her going mad from the bite of a stray dog?"

This clinched the case. Jakobb wilted immediately, for it was a fact that I had offered him thirty dollars for a beautiful heifer only a few weeks before he was obliged to kill her in her madness.

"The interest representing annual profit alone on that beast, Mr. Dunk, would pay a dozen dog's taxes, and your case is a common one. Then look at the danger to human life from mad dogs. Viewing the matter from a physiological stand point, we know that their numbers, and the consequent hunger, persecution, and ungratified animal desire destroy the conditions upon which the good health of the animal depends, and the ravages of that terrible disorder; hydrophobia alone, should call forth efforts to prevent its effects by the destruction of its cause, to the extent of expediency, and thereby, also, root out this cancer of a great industry."

I felt satisfied that this reasoning would win Jakobb over, when he broke out with, "I guess it's all a cry to get money; anyhow, the people's agin it."

Here a ray of light suddenly came over me, which enabled me to see the ground of Mr. Dunk's action. Several times during the conversation he had endeavored to turn aside the current into politics, by asking me "who's your man for 'squire?" "Do you think Quintletuff Quibbles'll git the nomination for inspector?" etc., but I held him to the subject until the aforesaid light dawned upon me, then I knew that Jakobb "had his eye" on something, ('squire possibly,) and had heard a few of the subordinate, not the controlling element, (the class that does the grumbling, not the engineering,) go "agin the tax," and I judged he had concluded to "ride the tide," for he said "something." An ex-member of the House told me that "delegates would not tax their constituent's dogs for fear of losing votes and popularity."

Now, is it true that this sentiment, founded upon premises at war with the welfare and agricultural prosperity of the State, can prevail over the enlight-

ened element at work through the press, and in club-room and convention, (always triumphant in an intellectual arena,) to secure a dog tax for Maryland? In several of the counties of our State their public spirit and enterprise have been exhibited in securing a wholesome dog law, and I trust its benefits will be extended over all the State at the ensuing session of the Legislature; but should the enlightened element prove unsuccessful from the operation of the causes above mentioned, you have one reason, Mr. Editor, why rural Maryland stands still in the midst of the on-rush of the tide of Progress.

### AGRICULTURAL PAPERS.

The following sensible remarks of a correspondent in the *Valley Farmer*, we submit to our readers for their perusal and careful thought. Most every profession has papers and magazines devoted to their interests, wherein new ideas and inventions are heralded, which must redound to the advancement and progress of individuals as well as the general improvement of agriculture and its kindred sciences. He says:

"Is not the subject one of sufficient importance to interest you? Is not the practical experience of other farmers of value? Have you attained that degree of perfection in farming that you cannot further improve by your own or the experience of others? You answer these questions, except the last, in the affirmative; but you say, 'I have no time; if I get time to read the current news of the day, I think I do well.'" But is not agriculture of sufficient importance, compared with politics and passing events, so as to give it at least one-thirtieth of your reading time? When my boy comes from the post office with the newspapers, I sit down and read the agricultural papers first, and for the following reasons:

"First, etiquette requires it. If you have two or more visitors, one only able to call weekly and the others daily; the former able to give you practical advice in your business, whereas the others are only able to instruct—if these Mr. Dailies are men of sense, they will excuse you for showing preference to the conversation of Mr. Weekly, knowing that when he is absent you give them your undivided attention.

"Secondly, interest requires it, because you may get a practical idea that you can in your business improve by even the next day; whereas, if a train of cars has run off the track, a steamboat or building destroyed by fire through the carelessness of others, you could not help it; it may to certain parties be a great calamity, but the knowledge of it to others is only valuable as one of those lessons of experience by which we may profit.

"Thirdly, labor is saved by it. A thrifty farmer has labor daily of a two-fold character to perform—mental, to plan; physical to accomplish; his success depends as much on the former as the latter. In a practical agricultural journal ideas can be gleaned to save much of the former and occasionally much of the latter.

"Lastly, success requires it. The great secret of success, coupled with energy, is: first, understand your business; second, mind your business."

## CROPS IN THE SOUTH.

To the Editors of the Maryland Farmer:

Wishing to write you a few lines on a little business, and remembering an old promise, I will say a few things, which possibly may be a matter of interest to the readers of the *Farmer*.

That season has arrived when the farmer can make some estimate of his standing in crop matters for the year, there being only one point still in uncertainty—that is, the future price of cotton. Very much of the planter's welfare for the present year depends on that price. If prices should go up in time, he may yet come out whole; otherwise he will still be under a very heavy pressure, for the crop is unmistakably short. The spring was backward and quite wet—no very early planting; and where the old plan of putting in as early as possible was persisted in, despite wet weather and land, the failure has only been the more marked. Just here, let me predict, as argued in an article for your journal last spring, the advocates of very early planting will, year by year, grow fewer and fewer, at least until our seasons retrace their steps, and go back to the old-time habits; for of late years they have been later and later; and if this continues, the months assigned each must from necessity be changed. When this will take place, maybe some believe the *almanac man* can tell us. If so, let us have the information, and we may profit thereby. The unpropitious spring resulted in a very poor stand, especially on light lands. The wet spring was followed in many localities by excessive drought; and this, again, by the wettest time, since July, ever known in this region. Generally, the exception has been to find moisture enough to fallow the stubble land after laying by the crop. This season plowing could have been done at any time *not too wet*. Last year I got but little broken, in time for the end in view. This year I have broken all my stubble, rebroken that for barley, turning in pea vines; turned over a pasture, and now harrowing in rye, on land thus broken for pasture for cows, hogs and sheep, till spring; then to be plowed in and followed by peas. Wheat should go in now, but I must first gather my corn and peas. In a few days I hope to have these off, and then be putting under a fine green crop of grass and pea-vines, and on top of that wheat and clover. Clover flourishes where two bushels of that and orchard grass can be saved at one cutting. What say the incredulous on these crops for the South?

But to the results of this year's crop. The long and extreme wet of latter part of summer caused grown cotton bolls to rot, small ones and squares to shed, and a new growth to follow—all injurious

to the yield. The same weather nearly ruined late low-land corn where fodder was not off, and materially injured that more forward, causing it to rot. Peas, where planted at all, are fine. This is one of the most economical, but most neglected crops. Oats, except rust-proof varieties, a failure from rust; some crops not cut at all. Wheat not much better, from same cause. We want a rust-proof variety. Can you, or your readers, recommend one? I sow quite an early variety of little white, some of which I sent last fall to some of your experimenters, through Mr. Buckingham. Would like to hear results. I have also sown Boughton for several years. It rusts, but never falls—stem so stout; and I have thought might rust less if seed were renewed from your State every few years. It makes the richest flour I have ever seen, but is at least ten days later than the early white, which also makes a beautiful white, but not so rich-looking flour as the Boughton.

Money has never been scarcer, since the war, than during the present year, and is by no means easy yet. But with the disastrous seasons, we might have been worse off. For while there is less area in cotton, the corn and small grain area was increased by the same quantity, and this will probably counterbalance the injury done by unfavorable seasons, and we shall have less to buy than heretofore. It is said that bought experience is best. We have paid dearly for ours; we shall profit accordingly. We shall become entirely independent of all such uncertainties when we so diversify our agricultural pursuits (and no climate or latitude warrants a greater diversity) to such an extent that we shall raise all our supplies within our own borders, and have several instead of one crop from which to realize money. May the day be not far distant.

A Virginia friend (now farming in Georgia) has been recommending Mediterranean wheat, and sent me some, as rust-proof, to sow last season. I did not get it in till January, and it rusted badly. His own, from which this was taken, did too. But some, first season from Baltimore, did not. He represents it as yielding finely. What think you?

Very respectfully,

J. T. WINGFIELD.

WASHINGTON, GA., October 19, 1871.

GRASSES IN MIDDLE GEORGIA.—Gen. R. Toombs recently said: "I have succeeded well with clover, orchard grass and lucerne on uplands, and with herds grass on damp lands. I consider lucerne the finest forage grass that grows. It is thrifty and hardy, and makes more forage for six months in the year than any other crop. It should be sown more universally than it is."



## AGRICULTURAL CHEMISTRY.---XIII.

BY J. S. H. BARTLETT, M. D.

## OF THE ANALYSIS OF SOILS.

It would seem highly desirable that the agriculturist should be acquainted with the nature, properties, and composition of the soil he intends to cultivate. Though by long experience and observation he may learn the degree of fertility of each part of his land, it will in most cases be convenient for him to acquire this knowledge by shorter and more direct methods. For this purpose it will be necessary for him to make an analysis of the soil as the surest and readiest way of arriving at its defects, the means of remedying which a knowledge of agricultural chemistry will immediately suggest.

An analysis with minute exactness for this purpose would not only be unnecessary, but beyond the skill of the greater part of agriculturists to perform; and at the same time would be useless for the purpose in view. It is proposed to suggest a method of such easy accomplishment, that want of ability need not prevent anyone from conducting it.

In analysing an earth, a small quantity can be made friable by the hand before drying it. The first operation consists in drying this specimen carefully, in order to know the weight of water it contains. For this purpose it is placed (after being weighed) in a vessel over the fire, of which the heat is just sufficient to evaporate the water, this heat to be kept up for fifteen to twenty minutes. In order that no greater degree of temperature than is necessary may be applied, a few bits of straw may be put in with the earth subject to experiment; when these begin to turn brown, the vessel should be drawn from the fire. The next operation is to weigh the earth a second time, and the loss it has sustained will show the weight of water which has been evaporated, and which served to moisten the earth. In performing experiments upon earths at a high temperature, it is easy to ascertain the power which they have of absorbing moisture, and from this some judgment may be formed of their fertility.

After the quantity of free moisture contained in the sample is ascertained, the sample must be rubbed up in a mortar to reduce the size of the particles. By shaking upon a sieve, the gravel and other hard substances may be separated from the finer, which will pass through readily. Test the coarser particles separately, if they are calcareous, acids will dissolve them, producing at the same time an effervescence. To prove this, put some of them in a glass vessel with strong vinegar or dilute muriatic acid, if they are composed of carbonate of lime they will be entirely dissolved. If the coarse particles do not effervesce with an acid, they are composed

entirely of silica, or alumina, the former being rough and sinking rapidly in water, while the latter is smooth and unctuous to the touch, and mixes with water in which it remains some time suspended.

If the coarse particles are only of quartzous sand, or of pure silica, water and acids will produce no effect upon them.

It sometimes happens that these coarse particles are mixed with the remains of animal or vegetable substances imperfectly decomposed, but these are easily recognized by the characteristics which distinguish fossil substances. It now remains to examine the finely divided and pulverulent soil which passed through the sieve, this contains the earths, salts, and animal and vegetable substances in a state of minute division. In order to ascertain the nature and proportions of the principles contained in this mixture it must first be weighed, and then boiled in say, four times its weight of water, from ten to fifteen minutes, and left to settle. A precipitate will be deposited, consisting only of the heaviest portions of the mass, usually of fine siliceous sands, the turbid liquor which floats above being thrown on a filter, the earths and some salts not easily soluble remain upon the filter, and the water charged with all the soluble portions flows into a vessel destined to receive it.

We find by this operation three distinct products, first the precipitate at the bottom of the vessel in which ebullition was performed, consisting of the finest sand; secondly, that remaining upon the filter, consisting of a mixture of earths and insoluble salts, and thirdly, that which contains in solution all the salts and vegetable substances capable of being dissolved in boiling water. The two first after they have been dried with care and their weight ascertained, must be examined in order to know the nature and proportions of the substances which compose them. By testing the deposit constituting the first product by acids, the calcareous portions of it will be dissolved, while those parts which are insoluble may be treated by the means for separating alumina from silica. For the part which is remaining on the filter it is sufficient to make an analysis of it by pouring upon it muriatic acid till it will no longer effervesce, this will dissolve the carbonates of lime and magnesia should there be any present, as well as any oxide of iron.

The solution being filtered, any substance not dissolved will remain on the filter, and must be washed with water till the water runs off tasteless, the residuum must be dried and weighed, it usually consists of alumina, and some animal and vegetable matter. In order to ascertain if oxide be present in the solution, introduce a small bit of oak bark, if the liquor renders it brown or black, it contains iron. Lime and magnesia can now be



tested for, and if any, precipitated by means of a solution of carbonate of soda, after having poured off the liquor, the residuum must be washed and dried, when its weight will give the quantity of carbonate of lime contained in the earthy mixture.—Practically, unless iron exists in a large quantity in a soil, an application of carbonate of lime will neutralize any injurious influence it might otherwise exert on plants. By a little practice any agriculturist who has the time and inclination to do so, can by following out the foregoing directions analyze a soil with sufficient accuracy to satisfy himself of its constituents. If it should be desired to extend the process further, so as to discover the existence of the salts which play an important part in vegetation, the object can be effected to a certain extent by boiling the finely divided earth in water, which will separate from it the soluble salts it contains.

The evaporation of the liquid which holds them in solution, will discover their nature and proportions. If the operation be carefully conducted the salts can be obtained in crystals, and by the character of these their properties can be distinguished. Niter has a sharp taste and consumes upon glowing charcoal, marine salt decrepitates and splits with a sparkling appearance over the fire, sulphate of soda swells up with the heat, giving out an aqueous smoke, and leaving a dry white residuum. But when the salts are insoluble, as phosphate of lime, or soluble with difficulty, as sulphate of lime, water will not act upon them.

To ascertain if a soil contains sulphate of lime (gypsum, plaster of Paris,) Davy advises to take an exact quantity, 400 grains for example, mixed with one third the quantity of powdered charcoal, expose it in a crucible during half an hour to a red heat, afterwards boil it for a quarter of an hour in a half pint of water, filter the liquor and expose it for some days in an open vessel, if it form a white precipitate, the soil contains sulphate of lime, and the weight of the deposit will make known nearly the proportion.

To judge the existence of phosphate of lime, digest the earth in an excess of muriatic acid, evaporate the solution to dryness, wash the residuum in a large quantity of water, and the insoluble phosphate will remain alone.—*Journal of Applied Chemistry.*

**FALL PLANTING OF FRUIT TREES.**—A point now well settled is, we think, an admirable one for both cultivators and the trade, *i. e.*, the fall is the best time for tree planting. If for no other consideration than that of *plenty of time for careful handling*, we would esteem it a point well worth gaining. The spring often opens in a hurry, the nurseryman is often caught, and cannot hurry trees off fast enough; and some one is always behindhand with his order till the last moment, and then grows because his trees are started and putting forth leaves before he gets his order filled. Order early in the fall and plant when you have an abundance of time.—*The Horticulturist.*

## ENGLISH AGRICULTURE.

### How Vegetables are raised in England--Some Useful Hints Gleaned by a Practical American Gardener.

We published in our August number of the *Farmer* a letter from Charles Barnard, written for the New York *Post*, on English Agriculture, of a highly interesting character. We now present a second letter, taking up the subject of vegetable gardening in England, an art which appears to be far in advance of the general practice—even among careful gardeners—in this country. He writes:

One of the most remarkable afternoon sights in London is the procession of market teams coming into the city from the gardens in the suburbs.—From 5 o'clock till midnight the heavy roll of these mountain-like wagons, piled high with vegetables, shakes the house as they join their rumble to the roar of Piccadilly, near my lodgings. In the morning the same huge, four-horse carts may be seen returning loaded with manure from the city mews or stables. Not a nice, but evidently a very old custom. The produce is generally packed in baskets, and the whole appearance of the team, with its great horses and burly driver, is eminently English. Besides these countless loads from the country, the railways bring tons upon tons of fresh vegetables each day, both from the country and the continent. Surely, the three millions of consumers in London are well fed.

#### ACROSS THE RIVER.

Let us cross the river, and by means of the cars at Waterloo station, take a run over the tops of the houses and out into the country. By making a detour through Battersea we may get a flying glance at some of the market gardens in the suburbs. A very brief inspection will show us many things of interest.

The first mile or two is through a wilderness of chimney pots. Through the yellow smoke we catch glimpses of the river, Westminster Palace and Abbey, and a score of other places of interest. As we are students of horticulture, not history, we cannot stop to notice them. We dive under other railways, or fly over them at full speed. Battersea Park, with its wide common and lovely gardens, is passed, and the houses dwindle into detached blocks, with wide, bare city lots between them. Not, as in New York, mere refuse heaps, but gardens, all of them.

#### RAILWAY GARDENS.

With us, the sloping sides of a cutting would stare in useless yellow gravel. Here, they are green with grass, or laid out in gardens that seem ready to slide down hill to the track. These gardens along the sides of railways are something peculiar to England.

They are to be seen almost everywhere. The space between the track and the fence on both sides is always put to some use, unless too steep to hold the soil. Vegetables are most common. Grass is used in some places, and near the stations flowers are common. Often the name of the station is marked out on the bank in colored stones, or in flowering plants; or the letters are cut out of the sod, and the borders so made are gay with flowers or are green with vegetables.

These gardens seem to be cultivated by the railway guards. Whether they rent them of the companies, or how it is managed, is something I have not ascertained. It is enough to know that not an inch of land is lost. Even such wastes as these are made to yield food for man or beast.

Stopping every half mile we push farther and farther into the country. The houses dwindle into detached villas, or group themselves into villages. On every side we see acres beyond acres of lettuce, peas, rhubarb, and other field crops.

Stopping at Isleworth, let us walk back towards Kew and Fulham. Here is a pretty, home-like place; let's go in. There is no need of an introduction. The mere fact of being from America is sufficient. Tell them that and they are ready with every attention. Hospitality means something in England. This place (Mr. Wilmot's) is mainly devoted to fruit culture.

#### CUCUMBERS AND MELONS.

In a low lean-to house, with the walk next the back wall, we find the vines growing like so many grapes under the roof. A bed of soil is prepared upon the table next the front of the house, and within two feet of the glass. Young plants, raised in pots, are planted about two feet apart in a single row along the front of the border. As they grow they are carefully trained upon a wire trellis about eight inches from the glass. Only one shoot is allowed to grow, and the laterals are pinched off at the second leaf beyond the flowers. The flowers come out in clusters, and by care they can be distributed evenly along the central shoot. Melon vines are allowed to bear from three to five melons. Cucumbers many more, and in succession.

The melons as they swell are carefully tied up with netting or strings to take the weight from the vine. Cucumbers are allowed to hang freely under the vines. They are of the black spine variety, and produce fine, long, slender fruit, that hangs like so many bunches of grapes on the shady underside of the green vine-covered roof. Melons are allowed to grow about five feet long; cucumbers much longer.

The cucumbers are in bearing a long time. The melons produce only one crop. There are a great many other ways of growing cucumbers, but this is a type of them all.

There is nothing particularly difficult in this culture. It is often done in America, though in far more slovenly ways. We set the plants in borders, keep them warm and well watered, and think we have done our whole duty. A glance at an English cucumber or melon pit shows that we have much to learn, both in neatness, care and patient attention to details. Will it pay, did you say? I don't know. Try it on and see. Anything will pay if you make up your mind that it shall pay. The question is not will it pay, but have you the enterprise, energy and skill to make it pay?

#### NOVELTIES—BEANS, ETC.

Early beans under glass are certainly novelties. Our early Mohawk bean is here forced for the market. There are plenty of people in London, and probably in New York, who are willing to pay a liberal price for beans in April and May. They buy them by count—so much per hundred pods. The pods are large and eaten green, as with us in summer, that is, as string beans. They are raised in

great quantities, whole ranges of hothouses being devoted to their culture; and, as far as I can judge from mere inspection, the culture is attended with profit. The process is somewhat like this: Fill eight-inch pots with rich soil, and plant just under the surface eight beans. Set the pots in a moderate temperature near the glass. With a steady and rather dry atmosphere they will advance quickly. Give plenty of water and air as often as the weather permits. When the plants are well up, remove three of the weakest. As soon as the roots begin to fill the pots, shift to a twelve-inch pot. The five plants, if kept growing rapidly, will soon come into bloom.

If the weather is cold or cloudy, so that air cannot be given, the fruit may be caused to set by gently brushing the hand to and fro over the flowers, or by shaking the plants. A current of air would be best, if not too cold: The plants will bear when six weeks old.

After removing the crop throw the plants out. Successive sowings must be followed up every two weeks. The first sowing is in December, the last in May. Beans for late forcing without fire heat are often grown in frames. In this case the seeds are planted in rows in the frame. Pots are by far the best. The chief point to be aimed at is plenty of fresh air and an even temperature.

The American cultivator at once points to the fact that early beans can be raised at the South and sent to the New York market. The same remark applies to London. The French gardeners send their produce into English markets by the steamboat load every day. In a certain way it injures the London trade, but people quickly learn to distinguish between vegetables that have traveled for ten hours by boat and rail, and those fresh from London hothouses. Everywhere in the shop windows one sees tomatoe, strawberries, melons, beans, &c., marked "English hothouse," and with higher prices attached. Comment is not necessary.

Tomatoes are forced to a limited extent in England. The plants are grown in borders, and subjected to a rigid system of pinching.

Now let us move on toward the city, and examine some of the

#### OUT-DOOR GARDENS

about Kew, Chiswick and Fulham. Huge patches of lettuce, counting plants by the hundred thousand, spread out in pale green sheets like a lawn. The ground is lost to view as we pass, so close do the plants stand to each other. There are a dozen women tying up the heads with a bit of matting. This lettuce requires to be bound up to make it blanch. Think of the labor to be performed on an acre. Forty-two thousand plants in one acre, and every one to be handled. Our cabbage lettuce is not used here, except occasionally for forcing. See that field thrown up into high ridges. That is full of asparagus. The banking up is to cause the shoots to push through a deep soil. I doubt if this is an improvement on our American method.

I could go on and fill whole pages describing the excessively close and careful culture of the English market gardens, but space forbids. All of the labor is by hand. Not even a plow, still less a horse-hoe, can be found on these gardens. The ground is turned up by the spade, and the manure put in with a digging fork. Manure is used in the utmost profusion. It is cheap and plentiful, and is spread over the land in enormous quantities. I doubt if any gardener at home ever uses so much per acre as



is here spread. The laborers are of both sexes, and often have each one half acre apiece—that is, on one hundred acres from one to two hundred men and women are employed. The tools are very heavy and inferior. We could not compel our hands at home to work with such miserable apparatus.—With all the art and science here, one is astonished to see the English farm laborer still stooping over the soil with tools of the last century. To see an old, gray-headed man, bent double by toil, painfully weeding a patch of broadcast turnips with a little iron rake three inches wide, and having a handle not twelve inches long, is a sight to make one indignant, if not sorrowful.

### ROTARY vs. MOLD-BOARD PLOWS.

A good deal of nonsense has been talked about dispensing with the plow and its substitution by rotary diggers. Any one who will take the trouble to carefully investigate the *modus operandi* of the share and mold-board will find that no other device will so well, on most lands, subserve the essential purpose of disintegrating the soil or accomplish the work with so little expenditure of power. In turning a furrow-slice, the particles of earth are moved upon each other in a degree which, though apparently small, is appreciable, and, provided the ground is in proper condition, sufficient to render it mellow and loose, of allowing surface water to sink and drain rapidly away, air to permeate the tilth, and the surface to be finely comminuted by the succeeding passage of the harrow. As refers to tillage in the eastern portion of the continent, therefore, the use of rotary diggers may be considered as offering no advantages; and improvements, for which there is yet much room, should be directed to securing increased efficiency in the common plow. Such improvements are needed in providing a surface, upon the ordinary cheap cast-iron mold-board, which will not coat with rust by exposure to the dew of a single night and the next day clog with adhering moist earth, until the effective surface is a straight one of rough dirt instead of a curved one of polished metal. Also, in furnishing a device which should be small, simple, and compact, and arranged below the beam in front of the standard, to prevent clogging with straw, long stubble weeds, etc., which, now, especially in fall plowing impede the work, and require frequent removal by a forcible and ungraceful movement of the plowman's boot. Also, in some adaptation of wrought-iron in the beam which shall avoid the instability and decay of wood and the brittleness of cast-iron. These remarks apply to the implement as used with horse or ox teams, but are even more appropriate with reference to the construction of the plows, which we trust, before many years are past, will speed through the stronger agency of steam. To recur to rotary digging machines, these, if ever adopted in practical agriculture, will find the field of operation in regions where it is only necessary to pulverize the surface of the ground. The light lands of California and of the arable portions of the Great Basin, would yield well to their action; and whether drawn over the ground by steam or animal power, the rotating devices that cut and comminute the soil will themselves be driven by steam-power, which alone will render this plan, even under the most favorable conditions capable of competing with the mold-board system.—*American Artizan*.

### MANURE YARDS AND MANURE MAKING.

There is no appendage of a farm that so much increases its fertility and promotes good crops, as a quantity of rich and well-rotted manure. This is always what the farmer should depend upon, rather than on the compounds of doubtful character and high price that now so abundantly tempt the farmer, ambitious of large crops, to buy.

Barnyards in this section of Pennsylvania are of two kinds, roofed and unroofed, and in either case the greatest care should be taken to prevent the water from running into them, as in passing through the country it is painful to see the loss occasioned by the colored drainage from manure yards fertilizing the public road, or some other spot upon which it is as much unneeded and equally as unproductive, thus robbing the farmer and impoverishing the land.

If a manure yard has very much inclination it should have a cistern in its lower part to receive the superfluous liquid, into which should be frequently put sufficient absorbents to take it up.—This will be found to be the most valuable part of the manure heap, but it is the part we too generally see neglected and entirely lost to the farm.

But generally these yards, if slightly dish-shaped and no water allowed to enter them except what falls from the clouds, will have their contents in good moist condition for the fall application. Manures should be frequently heaped up, as much greater wastage is suffered by having it spread thinly over a large surface. Manure yards, if roofed over or nearly so, should have a considerable quantity of water or snow spread over them at intervals through the winter, or else the manure will burn. This is a vital point in the care of a yard so situated.

The writer of this has a covered yard, fifty-two by forty-two feet, and during the first winter after its erection there was not enough of water supplied, which caused it to burn badly, very much diminishing the quantity and impairing the quality.—Last winter, however, there was applied at intervals four troughsfull of water of seven barrels each, and the consequence was, that the manure, which we have just finished hauling out, was in a moist condition and well rotted throughout.

The difference in quality between manure made under shelter, and the same quality made in the open air and suffered to spread over a great surface, has been estimated in the proportion of three to one. Be this as it may, there is no work on the farm that pays so well as good care of the manure.—*Cor. Germantown Telegraph*.

WHICH?—A young lady, recently married to a farmer, one day visited the cow houses, when she thus interrogated her milkmaid: "By the by, Mary, which of these cows is it that gives the most butter-milk."



## TOBACCO CULTURE IN VIRGINIA.

I see no correspondent in your paper from this section of the South, and I have therefore concluded to supply the omission by giving you occasionally a few items for your columns.

It may be proper to inform your readers that this is the section of the bright tobacco section of the United States, and the extent of country in which it is grown is comparatively quite limited. The counties of Stokes, Rockingham, Caswell, Guilford, and one or two more in North Carolina, and Halifax, Pittsylvania, Henry and Patrick in Virginia, compose about the entire region where the finest bright leaf is raised. The tobacco is sold from first hands principally in Danville and Lynchburg, and what is not manufactured in these two places is sent to Richmond by the tobacco speculators, who make it a regular business to buy it throughout the year. The planters bring it in sometimes from long distances in their covered scow-boat looking wagons, and deposit in one of the half dozen or more large warehouses used for the sale of tobacco. Here it is piled up in heaps like hay-cocks in a meadow, and sold to the highest bidder at auction. The sales take place every day, rain or shine, and when the "breaks" (a technical phrase used for any quantity received in a warehouse during the day) are heavy, the sales are quite lively and interesting to a stranger. The auctioneer commences at one end of the floor by taking a slip of paper stuck in the top of the pile, and reading to the crowd the owner's name and weight of the heap, and then cries how much for it. In a few moments it is sold, the clerk makes a record of the sale, and the planter goes to the office and gets a check for the amount. In the meantime the auctioneer and bevy of buyers pass rapidly along from one pile to another until the flooring is sold off, when another warehouse is visited and similarly cleaned out. In this way thousands of dollars worth of the weed is sold in a brief space of time, and at all sorts of prices. No two parcels bring the same, though the quality may be alike. The judgment of men in buying tobacco varies as widely as in other things, while the stimulant of competition sometimes influences bidders, who occasionally pay more in the "heat of battle" than they would when quietly sitting on a pile and discussing its merits with the owner.

The amount of tobacco sold in Danville is very large, for a town that can boast of only four thousand inhabitants. The sales for the current year will amount to upwards of twelve millions of pounds, varying in price from six cents to one dollar—the low figure for damaged and black, and the high for the very choicest yellow wrappers.

The soil on which this tobacco is grown is a gray sandy loam, with clay subsoil. No manure is used except guano, as it is claimed that vegetable and animal manures make the leaf coarse and black. Tobacco raised on the river and branch bottoms is of this inferior quality, and consequently little is planted on such land. The amount raised per acre is from five to six hundred pounds—generally the smaller figure; and the curing is done in tight log barns, with charcoal heat.

Where corn, oats and wheat are raised, two acres of tobacco to the hand are put in, and where the main crop is tobacco, from three to four acres. The present season has been very unfavorable for crops generally in this section. Oats were a total failure, and wheat not half an average yield—which at best is small on the uplands. The spring was hard on tobacco plants, and in consequence the planting was light and late; while the drouth from June to the middle of August retarded the growth of the plants generally, and burnt up the feebler. We are now having abundance of rain, but it came too late for the tobacco, giving it too late a growth, which will oblige the planters either to cut it green or let the frost in October finish it for them.

We enjoy the blessing down here of good health and little political turmoil, which is a good deal in our favor. Wages are from \$75 to \$100 and rations, which consist of 12 lbs. meat and one bushel of meal a month, firewood, garden patch and cabin added.—*Cor. Cuntry Gentleman.*

**PRESERVING EGGS.**—Correspondents of the *Maine Farmer* give the following modes of preserving eggs:—Years ago when eggs could be bought for ten or twelve cents a dozen, we used to begin to put them down in the fall, or as soon as the weather became cool. To a pail of water, I take quick lime about half the size of my fist. When perfectly cold, lay in the eggs carefully. In this way eggs can be kept almost any length of time desired. This has been proved for many years in my own family, and when taken out my wife considers them as fresh as when first put in. The lime water should not be too strong, as it will be likely to affect the shells.

*Another Way.*—I have had good success in preserving eggs through the winter by packing them in a stone jar, small end down, and filling in around them with coarse salt. Keep them in the cellar.

**USE OF GERANIUM LEAVES.**—It is not generally known that the leaves of a geranium are an excellent application for cuts, where the skin is rubbed off, and other wounds of that kind. One or two leaves must be bruised and applied to the part, and the wound will be cicatrized in a short time.

## Grape Culture.

### CARE OF YOUNG VINES.

The care of young vines, of which we propose to speak, is that of handling them at the time of their removal from the bed or border in which they grow, to the moment when they are finally planted.

We are fully persuaded that young vines are seriously injured by exposure to sun and drying winds when taken from the ground in the fall, and in spring time while being prepared for planting.

It is not uncommon that we see young vines or "roots," dug from the earth in which they grew, thrown in long rows and allowed to remain there for the half or the whole of a day, exposed to an atmosphere heated and drying, or so cold as to be seriously injurious to the young vines, without its being understood how much such treatment of them impairs their vitality; and at planting time they are brought into the field uncovered and exposed to a scorching sun and drying wind, without thought of the irreparable damage done them.

There is another kind of ill-treatment to which young vines are exposed, that of allowing them to remain in the earth where grown, without being raised or dug, and unprotected by additional covering, to all the changes and extremes of cold of winter.

It is not enough that life be preserved or death escaped; but the fullest life reasonably practicable should be preserved, that the best and most healthful growth be secured.

Vines injured in either of these ways may appear perfectly healthy and in best condition, without any one being able to discover it in time to avoid the misfortune of planting them.

We have no recommendation or remedy to offer, beyond that of never allowing the sun to shine directly upon the root of a young plant, or drying winds to blow upon them for one moment, except it may be while being adjusted in the very act of planting; and that for keeping through the winter, they may be bedded where no water comes to the bottom—where no frost reaches from above, and that earth come in contact with every part of each vine. Thus bedded, they will come out in the spring as full of life as they possessed in the fall. Heeling-in is the term applied sometimes to what we here call bedding.

The error most likely to occur in the keeping of the vines through winter, is that of insufficient protection from cold and wet, and as we have more than intimated, the great error in the treatment of them in the fall and spring, is their being allowed exposure to sun and drying winds, so easily avoided, that once known and appreciated, will never be repeated by any one if he is to reap the full fruits of it.—*Pleasant Valley Fr. and W. Reporter.*

### HOT-BEDS AND COLD FRAMES.

Hot-beds are manufactories for heat, and are so constructed as to hold it. Cold frames are constructed so as to make the most of natural heat. To construct a hot-bed, excavate a pit of the desired length,  $2\frac{1}{2}$  feet deep, and 6 feet wide; the sides of the pit are sometimes bordered up with rough boards, and should be raised above the surface 18 inches at the back, and 12 inches at the front. Strips are stretched across on which the sashes rest.

The heating material should be horse manure fresh from the stable. This should be thrown lightly into a heap, and in a few days the mass will commence fermentation, which is indicated by the escape of vapors. It should then be shaken up and thrown in a pile, and allowed to ferment a second time, which will usually be in two or three days. It may then be placed in a pit, and beaten down and covered with about three inches of earth. At first the temperature rises to ninety-five, or perhaps one hundred and five degrees. Wait a few days. When the heat is about ninety degrees, which can be ascertained by the thermometer, the mass should be covered with six inches of earth, which should be very fine, free from stones, and rich with phosphates, one thousand pounds being used to the acre. Sometimes old window sashes are used for hot-beds, in which case there should be a notch cut in the cross bars for the water to drain off, otherwise the sash will decay. The hot-bed is used principally for forcing cabbage, lettuce, radish, cucumbers, tomatoes, cauliflower and sweet potatoes.

Cold frames have no pit. The ground should be thrown up rough in order to absorb heat. It should be covered the last of autumn with leaves and straw, in depth sufficient to keep from freezing, so that it may be got at and planted by the last of February or the first of March. Then the sashes should be put on. If the ground is dry, before sowing it should be sprinkled. For protection against frost either fine shutters or straw mats are used. These mats may be made by almost any one out of rye straw. The distance of the rows in a hot-bed should be five or six inches.

Every seed, as a general rule, should be covered three times its own thickness with earth, and this earth should be packed, in order that it may remain during rains that seeds may not be washed out.—Tomatoes can be grown a half inch apart in the rows, peppers one-third of an inch, and lettuce one-fourth. Tomatoes should be started about the last of February or first of March, and they will be ready to go out by the time the ground outside is warm.

Plants grown in a hot-bed must be hardened before they are set out; this must be done by gradually accustoming them to the outside air by removing the sashes a short distance at first and increasing the distance according to the strength of the plant. The sashes should always be placed on at night, until the last two or three nights.—*Maine Farmer.*



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**MARYLAND AGRICULTURAL COLLEGE.**

The Board of Trustees of the Maryland Agricultural College met Friday morning, October 5th, in the library of the State Normal School; present, A. B. Davis, Esq., president, Messrs. Earle, Compton, McHenry, Lloyd, Farnandis, Dodge and Newell, and Rev. Dr. Regester, president of the faculty.—Prof. N. B. Worthington was appointed to take charge, temporarily, of the chair of practical agriculture. Mr. W. Douglas Williams was also appointed temporarily to the chair of chemistry and natural sciences. Mr. Williams is a graduate of the University of Virginia, and has just returned from Europe, where he has been studying chemistry at the University of Göttingen, under the celebrated chemist, Wohler.

**WASHINGTON COUNTY (MD.) FAIR.**

The 14th Annual Exhibition of the Washington County Agricultural and Mechanical Association was held near Hagerstown, beginning the 10th of October, and continuing four days, and was largely attended, considering the weather, which was unfavorable during a part of the time. The display, however, was highly creditable to the native wealth and industry of the county, the entries exceeding those of all former fairs. The fine specimens of Durham, Devon, Alderney, Holstein, Ayrshire, Teaswater and mixed cattle was all that the visitor could expect. The exhibition of horses, light and heavy draft, consisting of stallions, mares and colts, was one of the great features of the show, and indicated great improvement in the breed and character of their horses, most of this class having been bred in Washington County. The sheep department embraced thorough-bred Southdowns, Cotswolds, Merinoes and mixtures of all three; the display evidenced a decided improvement in this line. The swine department comprised White Chesters and Berkshires, and were really superior. The department of agricultural implements and machinery, much of which was manufactured in Hagerstown, reflected honor on the industrial home establishments. A large variety of household manufactures, flowers, fancy work, hams and poultry, dried fruit, fruits, vegetables, flour and grain, grapevines, &c., were on deposit, and altogether made up as attractive an exhibition as has ever been held by this enterprising Association. From all reports that have reached us, the Washington County Society may well exult at the decided success of their 14th Annual Exhibition.

**Fourteen Numbers for \$1.50.**

With a view of inducing new subscriptions to our FARMER for 1872, we offer to all subscribers sent in *this month* the two numbers of 1871—November and December—making fourteen numbers for \$1.50.—Our friends can serve us by calling the attention of their neighbors to this offer. Anyone sending us *five* names and \$5 will be entitled to an *extra* copy. We contemplate making such improvements for the new year as will commend the FARMER still farther to the patronage of the agricultural community.

**To Postmasters and Others.**

We offer as an inducement to postmasters and others to solicit subscribers to the MARYLAND FARMER, *fifty cents* on each subscriber sent—being \$1 per annum.

**Specimens.**—Specimen copies of the *Maryland Farmer* sent **FREE** to any address.



## LUCERNE AS A SOILING CROP.

The following, in the *Utica Herald*, was written by Richard Gibson, the stock manger for Messrs. Wolcott & Campbell, of New York Mills. We will only add that deep tilth in the preliminary preparation, and perfect freedom from weeds, are indispensable to success in raising lucerne. No plant is more impatient of the interference of weeds:

"Respecting the cultivation of lucerne, I will give you my experience with great pleasure, as I feel convinced that it is a soiling crop which has only to be tried to be more generally grown. It is essentially a soiling crop, being ready to cut in the spring before red clover, and continuing to produce heavy cuttings all through the summer, no matter how hot or dry. Last season, though unusually dry, did not appear to check its growth as we were able to mow over one field five times; and another, only seeded last spring, was cut four.

There are crops that will yield a greater weight of feed per acre at one cutting—corn, for instance—and which is a crop that lucerne cannot supplant, as it yields a very heavy weight of green food at that season of the year when most of our dairy farmers are requiring such. But as a soiling crop proper, I know of none that can compare with lucerne, and it is one that few farmers can afford to be without. It yields a heavy weight of feed all the summer, of excellent quality, and one that does not require the expense of ploughing and re-seeding after each cutting, nor each year, as by proper management, on suitable soil it will remain profitable five years.

Its relative value as compared with corn is decidedly superior, our sheep and cattle not only preferring, but doing much better on it. In fact, corn with me has not proved a very satisfactory soiling crop—cattle fed on it generally losing flesh, until we have all about given over growing it for that purpose.

The finest hay we have this winter, that is, the hay our calves and sheep prefer, is that with a little lucerne in it. Going on to the hay mow the other day, I saw a hole cut in it. Inquiring the reason, I ascertained that the shepherd had found where a load or two of hay with a little lucerne sprinkled through it, had been mowed away, and that he had been getting it for his sheep, as they ate it better than good clover hay.

A rich, dry soil, with an open porous sub-soil, is the most congenial to the growth of lucerne; but it will succeed well on any soil that will grow red clover to perfection.

The seed may be sown broadcast, or in drills ten to twelve inches apart. In England we generally followed the latter course, so that after each

cutting, or as often as might be necessary, we could run through the horse-hoe to loosen the soil and destroy weeds, &c., and by these means the crop could be grown successfully two years. But here I have generally adopted the former plan, sowing from twelve to fifteen pounds of seed per acre, as early in the spring as the season will permit.

The soil should be thoroughly prepared in the fall by deep ploughing, and manuring with rich, well-rotted dung, or what would be perhaps better, thirty or forty bushels of bone dust per acre, there being less liability of having foul seeds introduced, as this is a crop that is easily choked or run out by weeds, &c.

In the spring the soil may be lightened with a two-horse cultivator, or scarifier, making a fine surface mould. The latter is essentially necessary to get a good plant. The seed being very small, will only require lightly brushing in.

The after cultivation will consist yearly of a good top-dressing of well-rotted dung in the fall, and harrowing and rolling in the spring.

As I said before, weeds easily choke it; it will therefore be advisable to select a piece of soil free from weeds, and sow after some hoed crops, such as root crops or potatoes.

The first season will yield a fair crop, but the second, third and fourth will be the best."

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FEVER AND AGUE.—We find the following in the *Cleveland (Ohio) Herald*: "We wish to give a very simple remedy for fever and ague, and wish to emphasize it by saying that it has, to our knowledge, proved very efficacious. It is simply common salt. A tablespoonful taken in water, and a tablespoonful deposited inside the stocking next the foot as the chill is coming on. That's all there is in it; but, knowing that it has been efficacious in "breaking" the chill and perfecting a cure, we put it in our editorial columns, where no humbug remedy shall ever find a place, if we know it."

The editor of the *Marlboro' Gazette* says of this remedy: "We have known this remedy to make remarkable cures."

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### Maryland Farmer for 1872.

We would remind our readers that one more number will complete the volume for 1871 of the *MARYLAND FARMER*. We design making such improvements in its management for the coming year as will commend it more highly to the people of our State and neighboring States. We earnestly ask the co-operation of our friends to aid us in extending its circulation more generally. A very little effort on the part of our friends would secure a good list, or at any rate an extra copy.

## MARYLAND STATE FAIR---THIRD ANNUAL EXHIBITION.

The Third Annual Exhibition of the Maryland State Agricultural and Mechanical Association was commenced on the 3d of October, 1871, on the grounds at Pimlico. The weather was, on the whole, more favorable than it was when the Fair was held last year, at which time Wednesday was the only day that was clear. The Fair which was but recently closed was of a better character than that of the year before, both pecuniarily and otherwise; but the interests these exhibitions are intended to promote were by no means represented to the extent that they ought to have been, whilst the facilities for reaching the fair grounds, though manifestly an improvement on those of last year, were not as satisfactory as could be desired. Indeed, one of the drawbacks to the Fair, and it is a serious one, is the distance of the grounds from the centre of the city, which renders some sort of a vehicle necessary for reaching them. If they had been within easy reach of pedestrians the attendance would undoubtedly have been much larger, and even as it was there were two days of the Fair week in which very large numbers of persons were present. We need not say that the display of stock was really a most meritorious one, although some of the minor departments of the exhibition lacked fullness and variety. There was, as usual, an excellent display of agricultural implements, the bulk of the articles exhibited being of Baltimore manufacture.

The address this year was to have been delivered by the Hon. Daniel Voorhees, but circumstances of a nature personal to himself prevented his fulfilling his engagement. The Hon. Wm. Pinkney Whyte formed, however, a most acceptable substitute, and though called upon with but little time for preparation, delivered an able and an eloquent address.

### HORSES.

There was on exhibition a handsome display of horses. Prominent among these was the celebrated Percheron stallion of Colonel S. W. Ficklin, of Charlottesville, Virginia. He is a tremendous iron-gray, with huge limbs, and a frame which seemed capable of pulling an ordinary house. He carried his head erect, and seemed impatient of the control which his groom exercised over him. The wonderful thoroughbred mare, now 21 years old, belonging to John Merryman, Esq., of Hayfield, attracted universal attention. Gov. Bowie exhibited a pair of very handsome mares, named respectively, Mamie Bay and Nellie Grey—they were sired by the famous Stonewall Jackson.

### THE CATTLE.

The show of stock was large and good, comprising in cattle, 46 head of Short Horns, 59 of Devons, 14 of Ayrshires, 19 of Herefords, 132 of Alderneys, making a total, including 17 natives and grades, of 287 head. In Short Horns, three herds were enter-

ed, C. E. Coffin, Muirkirk, Md., taking the herd prize on bull 6th Earl Oxford, and cows Masterpiece, Rowena 2d, Elvina and Blossom. Mr. Coffin also received the prize on Lord Abraham, as the best imported bull, and on Belinda Oxford as best imported cow or heifer, the others going to John Dukehart, 1st on aged bulls, 2d on 2-year olds, 1st on yearlings, 1st on bull calf, 1st on heifer calf, and to C. A. Murphy, as 2d on aged bulls. Gov. Bowie had on exhibition a number of Devons, fresh from the pastures of Prince George's county, which attracted great attention. Mr. S. T. C. Brown, of Carroll county, also exhibited some fine cattle of this breed. The Alderneys were very fine, the largest herd being that of R. H. Rieman, Esq., president of the Society. Mr. J. H. McHenry displayed a large and very fine herd of this breed. Mr. Robt. Moore's Alderneys consisted of a bull, three heifers and five cows, all very fine. Fine Alderneys were also exhibited by Wm. Devries, J. W. Tyson, W. C. Wilson, J. S. Jenkins, Jesse Tyson, Clarke & Jones, L. Mongar. Ayrshires were exhibited by Chas. K. Harrison, W. B. Matthews, and others. John Merryman was the only exhibitor of Herefords.

### SHEEP.

The display of sheep was good. Cotswold seemed to be the most numerous, though there were many other varieties. Mr. Humphries, of Prince George's county, had on exhibition a ram which took the first premium, and which had hardly recovered from the long sea voyage to which he was subjected in his passage over. He was purchased of Mr. James Walker, coal yard, North Leech, England, a celebrated breeder of sheep. He was a splendid looking animal. He also exhibited three imported ewes, which were beauties. Mr. C. A. Murphy, of Cecil, and Dr. W. H. DeCoursey, of Queen Anne's, exhibited some beautiful long wools of American breed.

### SWINE.

This department attracted great attention, the display being very fine, but not large. From the most diminutive specimen of pig, hardly large enough to roast, to the largest size grunter, weighing hundreds of pounds, all were there, and all belied their traditional reputation by looking as neat and as trig as possible. Perhaps the Fair possessed no more interesting feature than the pig styes.—Many varieties of swine were on exhibition, noticeable among which were the Chester and Berkshire breeds.

### POULTRY.

The display of poultry was beautiful and would delight the heart of an ambitious farmer's wife.—Chickens, turkeys, African, American and wild geese, ducks of every variety, and even fancy pigeons were there of the choicest descriptions.—The gold-laced bantam, with his airy strut, is side by side with the pugnacious game Brahma, and Dorkings were plentiful of the largest and handsomest varieties. Amongst the poultry was a pair of blue herons from South America, exhibited by Master D. Sterrett Gittings, of Baltimore county, for which the Society ordered him a diploma.

### MACHINERY.

A large quantity of machinery was on exhibition. Threshing machines, wheat cleaners, reapers, mowers, cider presses, saws, plows and cultivators abounded, and the judges appointed to decide upon



their merits, found that they had assumed no light task.

#### TRIALS OF SPEED.

The trials of speed each day of the races were of a very exciting character, and excellent time was made, but the details of the same are too lengthy to give in this issue.

#### ANNUAL ADDRESS.

At two o'clock it became generally known that the Hon. Wm. Pinkney Whyte was on the ground, and was about to deliver the Annual Address.—Mr. Whyte kindly yielded to the solicitations of the gentlemen having the matter in charge, and at a late hour on Wednesday consented to deliver the address in place of the Hon. Daniel W. Voorhees, who telegraphed his inability to be present. In a short time the grand stand was crowded with people anxious to listen to the silver tones of Maryland's favorite orator. Mr. Whyte was conducted by the President to the top of the porch in the centre of the grand stand. He was accompanied by a number of gentlemen, prominent among whom were Governor Bowie, Governor Walker, of Virginia, Hon. John Merryman and Wm. Prescott Smith.—Most of the gentlemen seated themselves upon the front bench, and Mr. Smith introduced Mr. Whyte as the orator of the day.

Mr. Whyte, addressing himself to Mr. J. H. Riemann, the President of the Association, spoke as follows:

Mr. Whyte in substance said if he was standing there as the chosen orator of the Society he should shrink abashed at his utter unfitness for such a task; but he was there at a few hours' notice to play the part of a poor substitute for one whose eloquent words, like "apples of gold set in pictures of silver," would have gratified every taste and gladdened every heart in the immense, intelligent audience. It was not and scarcely could have been expected that one reared amid a wilderness of brick and mortar, and whose whole life had been spent in pursuits entirely at war with agriculture, should offer to an audience like that any suggestions, theoretical or practical, touching the cultivation of the soil.—[Applause.] He was not one of those versatile gentlemen who had one hand on the plow and the other on Plowden. He knew less of drakes in the barnyard than of Drake on Attachment, and of fern in the woods than of Fearnie on Contingent Remainders. He was unfamiliar with rotation in crops—the only rotation which had been drummed into his ears for some time past was rotation in office. [Applause.] He had heard more in his day of free soil than subsoil. So he would not harrow their feelings by undertaking a dissertation upon the various breeds of cattle, or pointing out the differing mechanism of a Hussey or a McCormick reaper; in dilating upon the best mode of irrigation and draining, or upon the innumerable phosphates and fertilizers (which are all sure to make their lands flow with milk and honey,) or by telling them of the quality of sheep (until he had seen it served as mutton,) for it would be a labor as exhausting to him as profitless to them.

He had not, therefore, studied the innumerable devices for sowing or reaping their lands, nor had he wandered for the last two days with the vast crowds among the stalls in mute inspection of the cattle from a thousand hills which their energy and pride had gathered here, and yet for all he did confess to an abstract admiration for the profession to which so many of them belonged.

For agriculture now, said he, with the aid of science, has become the noblest, as it is the most numerously followed, profession in our country. It is and ever must be the corner-stone of all our wealth. From it we literally get our bread and butter and almost all we wear—if not directly, yet in a great measure it is so. It calls forth the ingenuity of man in devising these labor saving machines we see around us, and sets in motion countless hands and machinery in producing these helps. It fills the holds of thousands of vessels, and sends them on their trackless way to feed the famine-stricken of distant lands, and in return enriches the farmers of our own. It gives manly independence to him who owns the soil he tills, no matter how small in acres; it enables him to rear his children in health and happiness, and to keep them from the temptations by which in city life they are beset.—[Great applause.] Even to him, so unused to the harmony which the revolving seasons give to farm life, there is a peculiar attraction in the tillage of the soil, whether in the expansive field of the great farmer or in the humbler sphere of the cottage garden. Especially in the culture of fruits and flowers there is something universal in its charms.

He then spoke of the delight this culture gives to rich and poor, high and low. The poor laborer fills his broken pitcher with rich earth that it may bring forth the modest daisy, while the man of letters and science finds rest in following the growth of favorite plants in his solarium. In Europe, better than here, as many present could testify, you can see to what extent this taste for flowers can be carried. One is not more impressed in wandering through the vast avenues of fragrant flowers which fill the palace gardens at Versailles, or in passing through the colossal conservatory which the genius of Sir Joseph Paxton erected for the Duke of Devonshire, at Chatsworth, crowded as it is with the choicest and rarest floral productions of every clime and country, than he is enchanted with the creeping vines and flowrets which decorate, alas! did decorate, the peasant's thatched cottage on the banks of the blue Moselle. [Applause.]

Here is common ground, on which wealth and poverty alike can stand, and if these annual exhibitions, with their exquisite floral displays, can only awaken and spread among our people such a taste, mansions and cottages, aye, even our railway stations along the arteries of travel in our State can be made things of joy and beauty to the passers by, and elevate and refine those whose hands have planted the seed and tended the flowers in their growth.

But in the wider field of agriculture those who till the soil to feed man and beast have made advancement in this country wonderful to behold.—Formerly theirs was but random culture in new fields, with but little light to guide them. For years their cry went up that while their numbers were greater far than those engaged in commerce and manufactures, both combined, they found no fostering care from National or State Governments,

The best and wisest of our fathers joined in this reproach of our early legislation. Congressional aid, in the cause of agriculture, was one of Washington's fondest hopes, and yet to him it seemed far off in its consummation, for in one of his letters to Sir John Sinclair, called the "father of British agriculture and statistics," he says: "It will be some time, I fear, before an agricultural society with Congressional aid will be established in this country. We must walk, as other countries have done, before we can run. Smaller societies must prepare the way for greater; but with the light before us I hope we shall not be slow as other nations have been." About ten years ago the Department of Agriculture, such as Washington had yearned for, was established by Congress.

How strange, while the American people so soon forgot that which lay nearest and deepest in the great heart of the Father of his Country—the danger of geographical divisions of the people—and which he impressed upon his countrymen in terms so pathetic and appealing in his Farewell Address, that which he had pointed as in the dim future was actually in process of realization amid the thunders of battle and the clang of arms, in that very conflict of sectional parties, against which in his latest words he had warned his fellow-citizens.

Mr. Whyte then spoke of the beneficial influence of the Agricultural Department, and its service to the farming and planting interests of the country. He also referred to the various State colleges and institutions, established by donations of land and money by the States; of the various newspapers and periodicals which now flood the villages and hamlets of the States, and illumine the pathway of the husbandman, and enable him intelligently to make the rough places smooth.

He then spoke of the increase of the productions of the soil by intelligent tillage, and of the necessity of making the demand grow with the augmented supply. He urged the people to make the demand here at home by encouraging manufactures, and dilated upon the fitness and propriety of making Baltimore a great manufacturing city. He praised its water power on the Patapsco, the Falls and the Gunpowder, and strongly advocated its being utilized for manufacturing purposes. He referred pleasantly to the combination of agriculture and mechanics in the name of the Society, and declared that they were twins as closely joined as Chang and Eng.

He then spoke of farming as a profession, and said that like his profession, it made for no man a fortune. He can only secure from it a comfortable living. It is a blessed thing it does not yield the enormous percentage extracted from banks and from manufacturing and insurance companies, for if it did, then merchant princes, said he jocularly, who luxuriate in model farms and summer retreats merely, would buy up many a homestead, at whose hearthstone now sit peace and contentment, like man and wife in the old days, together. He said he wished that he could appreciate the merits of this multitudinous array of cattle—the Alderneys and Devons, Herefords and Short Horns—which evoke such high commendations on every side, but he was sure it must remain an unsatisfied longing; yet there was one animal here in which he felt he bad, with others, a community of interest.

He then referred to the horse, now seriously and then jokingly, and after making many allusions to man's fondness for him, to Rarey's plan of train-

ing, and to the tenderness and care for maimed animals shown by heathens as well as Christians, he said he was no believer in the Monboddio doctrine, which claims that all men were originally monkeys, nor in the Buddhan theory of the transmigration of men's souls into animals. But this he did subscribe to, that nearly every animal had something of man in its composition; and that man, or at least woman, was the perfection of all animals.—Lavater found but twenty-four removes in the scale of beauty between the frog and the Apollo Belvidere—each successive delineation resembling its predecessor so nearly as to be distinguishable only on minute examination. However that may be, he said, in the descending scale, both for symmetry of form and in sagacity, the horse is next to man.

He then cited instances of the sagacity and devotion of the horse. He spoke in terms of praise of the horses on exhibition here, but warned the Society to look well to its laurels, lest its younger brother, the Maryland Jockey Club, outstripped it in their display of horses. Certain it is, said he, in their efforts the club will be on the right track.

Mr. Whyte then, concluding, complimented the Society on its successful progress, speaking in high terms of the good influences brought to bear by these annual gatherings, and finally said that he hoped the Society might continue prospering and to prosper, and as it grew in years, if the same wise counsels prevail as at present, he was sure it would win the honor and respect which dignified old age always engenders.

During the delivery of the oration Mr. Whyte made several happy allusions to Governor Walker, of Virginia, Governor Bowie, of Maryland, and other prominent agriculturists, and when he concluded loud shouts of applause were sent up.

At the conclusion of Mr. Whyte's address Mr. Rieman, the President, introduced Governor Walker, of Virginia, to the audience. The Governor was called upon for a speech. He came forward and bowed to the audience, and his handsome face and commanding figure excited universal admiration. Governor Walker after some jocose allusions to those portions of Mr. Whyte's speech which referred to horses, thanked the people for the compliment they had extended him and took his seat.—Governor Bowie was called for, but declined speaking.

#### ELECTION OF OFFICERS.

At a meeting of the Association, held on Thursday, October 5th, at Raine's Hall, the following were elected the officers of the Association for the ensuing year: *President*, Joseph H. Rieman; *Corresponding Secretary*, W. S. G. Baker; *General Secretary and Treasurer*, David C. Trimble; *Executive Committee*, Joseph H. Rieman, Baltimore County; General George S. Brown, Baltimore city; Jas. Howard McHenry, Baltimore County; Dr. W. H. DeCourcy, Queen Anne's County; Henry O. Devries, Howard County; R. F. Maynard, Baltimore County; Josiah Lee Johnston, Baltimore city; Jesse Slingsluff, Baltimore County; Wm. Devries, Balti-



more County; Benj. H. Waring, Baltimore City.—  
*Vice-Presidents*, Dr. S. P. Smith, Allegany County;  
 Dr. E. J. Henkle, Anne Arundel County; Alexander  
 D. Brown, Baltimore County; Washington  
 Booth, Baltimore city; E. Whitman, Baltimore  
 city; S. T. C. Brown, Carroll County; Daniel  
 Field, Caroline County; T. B. Turner, Calvert  
 County; William M. Knight, Cecil County; John  
 W. Jenkins, Charles County; Col. James Wallace,  
 Dorchester; Colonel George R. Dennis, Frederick;  
 J. Lee Carroll, Howard; Colonel R. McHenry, Har-  
 ford; D. C. Blackiston, Kent; A. Bowie Davis,  
 Montgomery; Charles B. Calvert, Prince George's;  
 Hon. James T. Earle, Queen Anne's; Dr. George R.  
 Dennis, Somerset; Colonel H. G. Key, St. Mary's;  
 Colonel Edward Lloyd, Talbot; W. J. Aydelot,  
 Worcester; William Dodge, Washington; Purnell  
 Toadvine, Wicomico; W. W. Corcoran, District of  
 Columbia.

#### AWARD OF PREMIUMS.

The following award of Premiums was made by the  
 several examining Committees:

##### DEVONS.

Best bull 3 years old, \$40, Gov. Bowie; best between  
 2 and 3 years old, \$20, S. T. C. Brown; second best between  
 2 and 3 years old, \$15, S. T. C. Brown; best between 1 and  
 2 years old, \$20, S. T. C. Brown; second best between 1  
 2 years old, \$15, S. T. C. Brown; best bull calf, \$10, S. T.  
 C. Brown; best cow three years old, \$30, Governor Bowie;  
 second best cow three years old, \$20, S. T. C. Brown; best  
 heifer between 2 and 3 years old, \$20, S. T. C. Brown; second  
 best heifer between 2 and 3 years old, \$15, S. T. C. Brown;  
 best heifer calf, \$10, S. T. C. Brown; best heifer  
 calf between 1 and 2 years old, \$10, S. T. C. Brown; best  
 Devon herd, \$75, S. T. C. Brown.

##### AYRSHIRES.

Best Bull 3 years old, \$40, Wm. B. Matthews; best bull  
 between 2 and 3 years old, \$30, Charles K. Harrison; second  
 best bull calf, \$10, Charles K. Harrison; best cow 3 years  
 old, \$30, Wm. B. Matthews; best heifer between 2 and 3  
 years old, \$30, Charles K. Harrison; second best heifer  
 between 2 and 3 years old, \$15, Charles K. Harrison; best  
 heifer calf, \$10, Charles K. Harrison; best heifer calf  
 between 1 and 2 years old, \$10, Chas. K. Harrison; best  
 Ayrshire Herd, \$75, Charles K. Harrison.

##### HEREFORDS.

Best bull 3 years and over, \$40, John Merryman; best  
 bull calf, \$10, John Merryman; best cow 3 years and over,  
 \$30, John Merryman; second best cow 3 years and over,  
 \$20, John Merryman; best heifer between two and three  
 years, \$30, John Merryman; second best heifer between 2  
 and 3 years, \$15, John Merryman; best heifer between 1  
 and 2 years, \$10, John Merryman; best heifer calf, \$10, J.  
 Merryman; best Hereford herd, \$75, John Merryman.

##### FAT CATTLE.

Best beef on hoof, bred and fattened in the State, and  
 owned by the exhibitor three months previous to exhibi-  
 tion, \$25, John Merryman; best beefs, \$25, S. T. C.  
 Brown.

##### ALDERNETS.

Best bull 3 years and over, \$40, J. W. Tyson; second  
 best bull 3 years and over, \$25, W. Devries; best bull be-  
 tween 2 and 3 years, \$20, W. C. Wilson; best bull between  
 1 and 2 years, \$20, J. S. Jenkins; second best bull between  
 1 and 2 years, \$15, Robert Moore; best bull calf, \$10, J. H.  
 McHenry; best cow 3 years and over, \$30, Jesse Tyson;  
 second best cow 3 years and over, \$20, Clarke & Jones; best  
 heifer between 2 and 3 years, \$30, Wm. Devries; second  
 best heifer between 2 and 3 years, \$15, L. Mongar; best  
 heifer calf, \$10, J. H. McHenry; best heifer between one  
 and two years, \$10, to be decided between Wm. Devries  
 and J. W. Tyson; best Alderney herd, \$75, Wm. Devries.

##### SHORT HORN.

Best bull 3 years old, \$40, John Dukehart; second best  
 bull 3 years old, \$25, C. A. Murphy; best bull between two  
 and three years, \$20, C. E. Coffin; second best bull between  
 2 and 3 years, \$15, C. E. Coffin; best bull between 1 and 2  
 years, \$20, John Dukehart; best bull calf, \$10, John Duke-  
 hart; best cow 3 years old, \$30, C. E. Coffin; second best  
 cow 3 years old, \$20, C. E. Coffin; best heifer between 2  
 and 3 years old, \$20, C. E. Coffin; second best heifer be-  
 tween 2 and 3 years old, \$15, C. E. Coffin; best heifer be-  
 tween one and 2 years old, \$10, C. E. Coffin; best heifer  
 calf, \$10, John Dukehart.

For best Short Horn bull, diploma and \$40, E. Coffin;  
 best Devon bull, Piedmont, diploma and \$40, S. T. C.  
 Brown; best Alderney, Jersey or Guernsey, Southam-  
 pton, diploma and \$40, J. H. McHenry; best Hereford, Sir  
 Richard No. 2, diploma and \$40, John Merryman; best  
 Ayrshire, Glenace, diploma and \$40, C. K. Harrison; best  
 Short Horn cow or heifer, diploma and \$30, C. E. Coffin;  
 best Alderney, Jersey or Guernsey, Fides, diploma and  
 \$30, Col. J. S. Jenkins; best Hereford, Miss Monk, diplo-  
 ma and \$30, John Merryman; best Ayrshire, Miss Meikle,  
 diploma and \$30, C. K. Harrison.

##### HERD PREMIUMS.

For the best Short Horn Herd, \$75, C. E. Coffin.

##### GRADES AND NATIVES.

For the best cow, Millie, \$31, Jno. O'Neil; second best  
 cow, Cora, \$20, L. Mongar; best cow or heifer between 2  
 and 3 years, Clover, \$10, Mrs. George Brown; second best  
 cow or heifer, Berkley, \$5, Benjamin Marple; best cow or  
 heifer between 1 and 2 years, \$10, Mrs. George Brown;  
 second best cow or heifer, Kate, \$5, William Gill; best  
 calf, \$5, Benjamin Marple.

##### WORKING OXEN.

For the best yoke, \$30, J. H. McHenry; second best  
 yoke, \$20, J. H. McHenry; third best yoke, \$10, J. H.  
 McHenry.

##### SWEESTAKES.

For the best and largest herd of any pure breed, not less  
 than ten, owned by exhibitor, diploma and \$75, John Mer-  
 rymann, for herd of Herefords.

##### The Herd Book Selections.

The committee of gentlemen from Philadelphia, who  
 were appointed to select cattle to be entered in the herd  
 book, and to be present at the National Fair to be held dur-  
 ing the winter in New Jersey, made the following selec-  
 tions:

Ten Cows.—Georgetta, J. H. Rieman; Bell, Clarke &  
 Jones; Rosebud, Wm. H. Perot; Louise, Wm. Devries;  
 Eugenie, John E. Phillips; Lillie, Robert Moore; Minnie,  
 J. S. Jenkins; Gold Drop, J. H. McHenry; Daffodil, J. H.  
 McHenry; Lucy, Wm. C. Nelson.

Ten Heifers.—Arletta, J. H. Rieman; Orcletta, L. Mon-  
 gar; Hebe, Wm. Devries; Julia, J. E. Phillips; Bright  
 Eyes, J. H. McHenry; Dignity, J. H. McHenry; Fides, J.  
 S. Jenkins; Cowslip, W. E. Wilson; Pink, Clarke & Jones;  
 Heloise, Robert Moore.

Four Bulls.—Southampton, J. H. McHenry; Saladin,  
 Robert Moore; Sir Dary, J. H. Rieman; General Beaure-  
 gard, Wm. Devries.

Each of the above is to be branded on the horn. The  
 brand of course will be designated by the Association from  
 which they are selected. All the owners have promised  
 to be present with their stock during the exhibition.

##### BLOODED HORSES.

Best thoroughbred stallion, diploma and \$100, E. A.  
 Clabaugh, for Vauxhall; second best do., \$50, J. B. With-  
 ers, for Sherrod; best thoroughbred mare, \$50, W. String-  
 field, for Catina; second best do., \$25, Dr. J. P. Thom, for  
 Young Utilla; best horse colt, 3 years old, diploma and  
 \$30, W. Stringfield, for Frogtown; second best do., \$25,  
 E. B. Maule, for Pimlico; best horse colt 2 years old, di-  
 ploma and \$25, W. Stringfield, for Master John; second  
 best do., \$5, Dr. J. P. Thom, for Collector; best horse  
 colt 1 year old, diploma and \$20, J. H. McHenry, for Sar-  
 asan; best filly 2 years old, \$15, W. Stringfield, for Nemay;  
 second best do., \$10, Dr. J. P. Thom, for Teetotal; best  
 filly 1 year old, \$10, J. H. McHenry, for Arabia; second  
 best do., \$5, J. H. Rieman, for Belle; best sucking filly, \$5,  
 Dr. J. P. Thom, for Hattie Howard.

##### HORSES FOR GENERAL UTILITY.

For the best stallion, "Membrino Hamiltonian," diploma  
 and \$50, G. P. West, Baltimore; second best stallion,



"Black Crook," \$25, C. T. Cockey, Baltimore county; best brood mare, "Black Maria," \$30, C. A. Murphy, Cecil co.; second best brood mare, "Fanny Hill," \$15, C. A. Murphy, Cecil county; best pair matched coach horses, "Jackson and Lee," \$50, O. F. Bresee, Baltimore; second best pair matched coach horses, "George and Dick," \$25, Moses Moses, Baltimore; best pair matched coach horses, raised by the exhibitor, "Pat and Punch," \$50, John Merryman, Baltimore county; best gentleman's saddle horse, mare or gelding, "Brig," \$30, Isaac F. Reich, Frederick; second best gentleman's saddle horse, "Black Prince," \$15, E. Y. Goldsborough, Frederick; best lady's saddle horse, "Bettie Bay," \$30, Wm. Devries, Baltimore county; best boy's pony, not exceeding 13½ hands, "Blonde," \$20, C. H. Brademeyer, Baltimore; second best boy's pony, not exceeding 13½ hands, "Snow Ball," \$10, J. H. McHenry, Baltimore county.

## QUICK DRAFT.

For the best stallion, b, John, diploma and \$100, H. Haines, Washington county; second best stallion, s, Henry Clay, \$50, C. H. Hepburn, Baltimore; best mare, Victoria, \$50, G. S. Brown, Baltimore; second best mare, Norma, \$25, J. P. Thom, Baltimore; best horse colt three years old, General, diploma and \$50, Mr. Davis, Baltimore; second best horse colt 3 years old, Frank Blair, \$25, C. A. Murphy, Cecil county; best horse colt 2 years old, Bedford, diploma and \$25, G. P. West, Baltimore; 2d best horse colt 2 years old, Independence, \$15, Dr. W. H. DeCoursey, Queen Anne's county; for best horse colt 1 year old, \$20, Norman, C. Trump, Baltimore; for the 2d best horse colt 1 year old, \$10, Ruler, G. P. West, Baltimore; for the best sucking horse colt, \$15, Hayfields, John Merryman, Baltimore county; for the best filly 3 years old, \$30, Maggie Mitchell, C. A. Murphy, Cecil; for the second best filly 3 years old, \$20, Sorrel Filly, L. Mongar, Baltimore county; for the best filly 2 years old, \$15, Florida, Richard Norris, Baltimore; for the second best filly 2 years old, \$10, Loulie, John Merryman, Baltimore county; for the best filly one year old, \$10, Moselle, Dr. J. P. Thom, Baltimore; for the second best 1 year old, \$5, Membrino Maid, G. P. West, Baltimore county; for the best sucking filly, gelding or mare, \$5, Cresside, C. K. Harrison; for the best pair of horses, raised by exhibitor, diploma and \$50, Nettie Gray and Mamie Bay, Governor O. Bowie; for the best brood mare, in foal or with foal at foot, \$25, Kate, G. P. West, Baltimore; for the best quick draft gelding, \$25, George Allen, E. J. B. Whitaker.

## HEAVY DRAFT HORSES.

For the best stallion, diploma and \$50, S. W. Ficklin, for the second best stallion, \$25, J. H. McHenry; for the best mare, \$30, Wm. Gill; for the best horse colt two years old, \$20, Joseph Gillot; for the second best colt two years old, \$10, J. B. Walker.

## IMPORTED HORSES.

Best stallion, \$100 and diploma, Col. S. W. Ficklin, of Charlottesville, Virginia.

## JACKS, JENNETS AND MULES.

For the best American bred jacks, \$25, C. R. Chew; for the best pair mules, \$20, ridden by John Holmes.

## AMERICAN BRED SHEEP.

**Middle Wools.**—For the best buck, diploma and \$15, C. K. Harrison; second best buck, \$10, Col. J. S. Jenkins.—For the best pen of ewes, not less than three, \$15, Col. J. S. Jenkins; second best pen of ewes, not less than three, \$10, C. K. Harrison.—For the best pen of buck lambs, not less than three, \$10, Dr. W. S. Decourcy; for the best pen of ewe lambs, not less than three, \$10, S. T. C. Brown.

**Grades.**—For the best ewes, diploma and \$10, Col. Ed. Lloyd; second best ewes, \$5, C. A. Murphy. For best pen of ewe lambs, \$10, Col. Ed. Lloyd.

**Fat Sheep.**—For the best live mutton, diploma and \$10, Col. Ed. Lloyd; second best live mutton, \$5, C. A. Murphy.

## AMERICAN BRED SHEEP.

**Long Wool.**—For the best buck, diploma and \$15, W. Gill; second best buck, \$10, C. A. Murphy. For the best pen of ewes, not less than three, \$15, W. Gill; for the second best, \$10, C. A. Murphy. For the best pen buck lambs, not less than three, \$10, W. Gill. For the best pen ewe lambs, not less than three, John Humphreys.

## SLAUGHTERED MUTTON.

<sup>1</sup> First Premium, \$5, Col. Edward Lloyd, Talbot; second do., \$3, S. W. Thomas, Baltimore.

## SWINE.

**Small Breed.**—Best boar between one and two years, \$10, J. H. McHenry.

**Large Breed.**—Best boar over two years old, diploma and \$15, D. Sumwalt; second best do., \$10, Lewis & Hollingsworth. Best boar between one and two years, \$10, Jesse Tyson; second best do., \$5, George F. Page. Best boar between six months and one year, \$5, J. E. Marshall. Best sow over two years, \$15, A. B. Patterson; second best do., \$10, W. W. Esbin. For the best sow between one and two years, \$10, George F. Page; second best do., \$5, D. Sumwalt. For the best sow between six months and one year, \$5, C. K. Harrison. For the best lot of pigs (not less than five) not less than six months old, \$10, J. E. Marshall.

## POULTRY AND OTHER FOWLS.

**No. 1—Asiatic Fowls.**—Best trio of dark Brahmas, \$2; Col. J. S. Jenkins; second best trio of dark Brahmas, \$2, C. Trump; best trio of light Brahmas, \$2, Dr. J. S. Bowent second best trio of light Brahmas, \$1, C. Hess; best trio of buff cochins, \$3, C. Trump; second best trio of buff cochins, \$1, C. Hess; best trio of partridge cochins, \$2, C. A. Coffin.

**No. 2—Dorkings and Spanish.**—Best trio of gray dorkings, \$2, L. Mongar; best trio of black Spanish, \$2, W. Bowman; second best trio of black Spanish, \$1, W. H. Buck; best trio of white Leghorns, \$2, C. Betts.

**No. 3—Hamburgs.**—Best trio silver-spangled Hamburgs, \$2, W. S. G. Baker; second best trio silver-spangled Hamburgs, \$2, H. Fisher.

**No. 4—Games.**—Best trio Earl Derby Game, \$2, Jno. Merryman; second best trio Earl Derby game, \$1, C. Betts. best trio black breasted red game, \$2, Jno. Merryman; best trio other red game, \$2, Jas. Carrick; best trio gray game, \$2, Jno. Merryman.

**No. 5—Polish.**—Best trio golden Polands, \$2, W. Bowman; best trio sultana Polands, \$2, W. Bowman.

**No. 6—French.**—Best trio Crevecoeurs, \$2, Mrs. Jane Clark; best trio Houdans, \$2, W. Bowman; best trio La Fleche, \$2, G. S. Dietz.

**No. 7—Bantams.**—Best trio gold laced bantams, \$2, W. S. G. Baker; second best do., \$1, L. Mongar; best silver laced do., \$2, L. Mongar; second best do., \$1, W. S. G. Baker; best collection exhibited, \$20, L. Mongar; second best do., \$10, W. S. G. Baker.

**No. 8—Turkies.**—Best pair bronze turkeys, \$2, L. Mongar; second best do., \$1, C. Trump.

**No. 9—Geese.**—Best pair white China geese, \$2, C. Hess; second best do., \$1, L. Mongar; best pair wild geese, \$2, L. Mongar; best pair African geese, \$2, L. Mongar; second best do., \$1, Wm. C. Wilson.

**No. 10—Ducks.**—Best pair Aylesbury ducks, \$2, C. Betts; best pair musk do., \$2, L. Mongar; second best do., \$1, C. Trump; best pair Cayuga do., \$2, Wm. C. Wilson; second best do., \$1, C. H. Betts; best pair Rouen do., \$2, C. Trump.

**No. 11—Pigeons.**—Best collection, \$2, C. H. Betts.

## Implements and Machinery.

For the best machine to thresh and clean at one operation, for from 6 to 10 horses, \$30, "Altman & Taylor Vibrator," T. Norris & Son; for the best machine to thresh and clean at one operation, for from 2 to 6 horses, \$20, Diamond State Thrasher, T. Norris & Son; for the best thrashing machine without separator, \$10, E. Whitman & Sons; for the best straw carrier attachment for thrasher, \$5, E. Whitman & Sons; for the best sweep horse-power for from 6 to 10 horses, \$15, "Massillon Power," Herbert & Raymond; for the best sweep horse-power for from 4 to 6 horses, \$10, "Improved Felton Power," Griffith, Baker & Bryan; for the best mowing machine for 2 or more horses, \$15, "Wood's Mower Iron Frame," T. Norris & Son; for the best mowing machine (for hand power) for lawns, \$5, "Swift Lawn," Griffin, Baker & Bryan; for the best combined reaping and mowing machine, \$10, "Champion," G. Lee & Brother; for the best combined reaping and mowing machine, self-raiking attachment, \$20, "Champion," Lee & Brother; for the best hay tedder, \$10, "Bullard's," Griffith, Baker & Bryan; for the best grain fan to separate cockle, garlic, cheat, rat-fith, &c., from wheat at one operation, \$10, J. Montgomery; for the best cockle machine, \$5, J. Montgomery; for the best corn sheller, horse-power, \$5, Sinclair & Co.; for the best double spout corn sheller, \$4, Thomas Norris & Son; for the best single spout corn sheller, \$3, Griffith Baker & Bryan; for the best hay, straw and stalk cutter, horse or hand power, \$5, Slide & Co.; for the best hay and straw cutter, hand power, \$2, Parson & Finney; for the best horsehay fork, \$5, Thomas Norris & Son; for the best four grain cradles, \$3, E. Whitman & Sons; for the best four American grain and grass scythes, \$3, Sinclair



& Co.; for the best half dozen hand hay rakes, \$3, E. Whitman & Sons; for the best half dozen garden rakes, \$2, E. Whitman & Sons; for the best half dozen pitchforks, \$3, E. Whitman & Sons; for the best half dozen forks for digging, \$2, E. Whitman & Sons; for the best half dozen long-handled shovels, \$2, E. Whitman & Sons; for the best brier and bramble scythe, \$1, Sinclair & Co.; for the best portable steam engine, \$30, George Page & Co.; best portable farm mill, \$10, George Page & Co.; best saw mill for fire wood, \$10, Ohrm Portable Saw Co.; best shingle machine, \$5, George Page & Co.; best agricultural steamer, \$10, Mast & Co., Ohio; best farm pump, hand power, \$3, Charles Wood, of Baltimore; best farm pump, wind power, \$5, Wm. Lunnett, Baltimore; best water-ram or other water elevator by water power, \$10, Wm. Dunnett, Baltimore; best washing machine, \$5, E. Whitman & Sons, Baltimore; best clothes wringer, \$3, E. Whitman & Sons; best sewing machine, diploma, Keystone Machine Company; for the best one-horse plow, general use, diploma and \$4, E. Whitman & Sons; for the best two-horse plow, general use, diploma and \$6, T. Norris & Son; for the best three horse plow, general use, diploma and \$6, N. W. Slade & Co.; for the best plow for rough and new land, \$4, R. Sinclair & Co.; for the best subsoil plow, \$5, R. Sinclair & Co.; for the best hillside plow, \$5, Griffith, Baker & Bryan; for the best gang plow, \$4, T. Norris & Son; for the best one-horse plow for vegetables, \$3, T. Norris & Son; for the best hand plow, \$2, T. Norris & Son; for the best potato plow or digger, \$5, Sinclair & Co.; for the best harrow, \$5, E. Whitman & Sons; for the best corn cultivator, \$3, T. Norris & Son; for the best tobacco cultivator, \$3, T. Norris & Son; for the best horse hoe, \$3, R. Sinclair & Co.; for the best vegetable hand cultivator, \$2, R. Sinclair & Co.; for the best field roller, \$8, R. Sinclair & Co.; for best grain drill, with guano and seed attachment, \$15, Griffith, Baker & Bryan; for the best broadcast sower for seed and fertilizers, \$10, Spear Bros. For the best hay press, hand-power, \$8, Spear Bros.; best large cider and wine press, \$8, Thomas Norris & Sons; best small cider and wine press, \$5, R. Sinclair & Co.; best stump machine, \$3, E. Whitman & Sons; best stump puller, \$5, Griffith, Baker & Bryan; best churn, \$3, A. G. Mott; best platform scales, \$4, Spear Bros.; best ox yoke and bows, \$2, R. Sinclair & Co.; best self-opening and shutting gate, \$10, Lewis Ruter, Harford county; best road scrap r, \$2, R. Sinclair & Co.

## DISCRETIONARY PREMIUMS.

Best Paris ranges, \$10, W. E. Wood & Co.; best Routt's double shovel plow, coultar attachment diploma, Thomas Norris & Son; best hydro-carbon gas machine, \$5, Eli Sparks; best Whitney's patent manual motive power, \$5, N. W. Slade & Co.; knitting machine, manufactured by C. Tracy, York, Pa., C. Tracy, York, Pa.; knitting machine, manufactured by I. A. Hamilton, \$5, I. A. Hamilton; valuable attachment for any pattern of threshing machine, in shape of separator and cleaner, \$10, Griffith, Baker & Bryan; 1 pair blue herons, \$5, Master D. J. Gittings.

## CARRIAGES AND LEATHER MANUFACTURES.

For the best set cart harness, \$5, John D. Hammond; best set double farm wagon harness, \$5, John D. Hammond; best set carriage harness, \$10, Kneisi & Norfleet; best set buggy harness, \$5, Robert Craig; best set man's saddle and bridle, \$5, John D. Hammond; best set lady's saddle and bridle, \$5, John D. Hammond; best set travelling trunk, \$5, Samuel Hunt; best set two-horse family carriage, \$20, O. F. Bresee; best set trotting buggy, \$10, Hand & Cochran; best set jagger wagon for general use, \$15, Golbrath, Kirk & Co.

## CANNED FRUIT AND VEGETABLES.

Best collection, diploma and \$25, J. L. Shriver & Bro.; second collection, \$15, Meyer & Co.; third collection, \$10, J. Waltemyer; best spiced oysters, \$15, J. L. Shriver & Bro.; second best spiced oysters, \$10, Meyer & Co. Oysters, \$5, J. Waltemyer; do, \$5, J. S. Shriver & Co.; corn \$5, Myer & Co.; peaches, \$5, Shriver & Co.; lima beans, \$5, T. J. Myer & Co.; preserved bartlett pears, \$10, Miss A. Brackenridge; do, sickle pears, \$10, Mrs. John Grayson.

## MISCELLANEOUS HOUSEHOLD, &amp;c.

Cotton knit hand hose, \$1, M. D. Meyer; shawl strap, 1, Miss Mary M. Fisher; 1 blue silk monocolor, 1, Mrs. J. H. Rieman; 1 saddle cloth, 1, Mrs. E. Rieman; 2 crocheted ties, 4, Miss E. Trogler; 1 lady's bonnet, 1, Miss Sallie Balls; 1 Gipsy hat, 1, Miss Sallie Balls; 1 sofa cushion, 1, Miss A. Brackenridge; 3 handkerchiefs, 1, Mrs. Pegram. Landscape in oil, diploma and \$5, Mrs. Goldsmith; land-

scape in pencil, diploma and 5, Miss Skinner; assortment of photographs, 10, J. M. Swilt. For the best quilt, diploma and 2, Mrs. A. Smith; for the second best quilt, 1, Miss C. Hipsley; for the best pair home-made blankets, diploma and 3, Mrs. F. M. Shipley; for the best pair fine woollen knit long hose, diploma and 1, Miss S. Balls; for the best home made shirt, diploma and 2, Miss C. Neville; for the best hearth rug, diploma and 3, Mrs. N. H. Hale; for the best specimen of embroidery, diploma and 1, Miss Mary Stewart; for the best counterpane, diploma and 2, Mrs. J. D. Richardson; for the best woollen counterpane, 1, Mrs. F. M. Shipley; for the best home-made soap diploma and 1, Mrs. Wm. Conn; for the best home-made bread, diploma and 2, Mrs. Thomas; for the second best home-bread 1, Mrs. Conn; for the second best sponge-cake, 2, Mrs. Dr. Bosley; for the best specimen of pickles, diploma and 1, Mrs. Thomas; for the best specimen of fruit jelly, diploma and 1, Mrs. Brackenridge; for the best specimen of apple butter, diploma and 1, Mrs. Carman.

## GRAIN AND ROOT CROPS.

For the best sample of white corn, not less than 1 bushel, raised by exhibitor, \$5, Mrs. Geo. Brown; for the best sample of oats, not less than 1 bushel, raised by exhibitor, 5, G. W. Lurman; for the best sample of Irish potatoes, not less than 1 bushel, raised by exhibitor, 5, Jas. Carrick; for the best sample of sweet potatoes, not less than 1 bushel, raised by exhibitor, 5, Alex. D. Brown; for the best sample of mangel wurzel, not less than 1 bushel raised by exhibitor, 3, C. E. Coffin.

## CUT FLOWERS AND FLORAL DESIGNS.

For the best collection of cut flowers, \$3, J. Pentland; for the second best collection of cut flowers, 2, John Feast; for the best collection of dahlias, 3, Chas. Hamilton; for the second best collection of dahlias, 2, W. C. Wilson; for the best collection of roses, 3, Jas. Pentland; for the best original decorative design, 5, Misses Argie and Janie Breckenridge; for the second best original decorative design, 3, Jas. Pentland; for the best basket with flowers, 3, Mrs. A. J. Albert; for the best vase with flowers, 3, Miss Belle Breckenridge; for the best pair round hand bouquets, 3, Jas. Pentland; for the second best pair round hand bouquets, 2, Mr. Stendeymyer and George Brown; for the best round bridal bouquet, 3, James Pentland; for the second best round bridal bouquet, 2, John Feast. For the largest and most select collection, 10, A. Breckenridge; second largest and most select collection, 5, A. Breckenridge; best collection of geraniums and pelargoniums, 3, A. Breckenridge; second best collection of geraniums and pelargoniums, 2, A. Breckenridge.

## FALL CARE OF STOCK.

Cows, and especially young stock, if well wintered, may be considered half summered; and it is equally true that, if at the close of the growing season, they go into winter quarters in good condition, they may be called half wintered. The mistake is often made at this season of letting stock shift for themselves out of doors, especially if grass is abundant; but it should be recollected that a few hard frosts changes greatly the nutritive qualities of pasture in the field, and we have known it especially to almost dry up cows in milk. These should have shelter, with some hay or fodder, during cold nights, and only turned into the fields in the middle of the day. Grass growing is very different from dry and frosted grass, and it is true economy to begin early giving a little meal and bran daily, with some corn-fodder.

FINE TOBACCO.—At the recent Fair of the Maryland Agricultural Society, Mr. James M. Waring, of Nottingham District, of Prince George's County, received (through his commission merchants, Messrs Gibbons & Arnold, Baltimore,) the first premium on red tobacco,

## Horticultural.

### HORTICULTURE ON THE DELAWARE PENINSULA.

In the middle of August, a small company of Eastern horticulturists spent a week very pleasantly in a visit to some of the fruit farms of the Delaware Peninsula—among them were Charles Downing, George Thurber, P. T. Quinn, William Parry, Randolph Peters, and Howard M. Jenkins, of the *Delaware Tribune*.

The first fruit farm visited was that of Randolph Peters; three miles from Wilmington is his residence and also his nursery, but his orchard is located at Newark, about fourteen miles to the west. Here upon the slope of a hill is a pear orchard of ten thousand trees; the soil is stony, yet well drained, and position elevated, overlooking the county southward and eastward. The pear trees were planted nine years ago, about half standards and half dwarfs, the standards twenty feet apart, and a row of dwarfs every ten feet. The spaces between the trees have been cropped with corn regularly every year since the orchard was planted, and well manured with rotted barn-yard manure. Thirty or forty varieties are grown, but the most successful varieties were Buffum, Seckel, Bartlett, Duchesse and Lawrence. The trees have done admirably, and with such apparently negligent treatment (yet Mr. Peters says it is the best to prevent blight), they have out-borne themselves with heavy crops of fruit yearly. The crop of Bartletts would average, tree after tree, twelve ounces to each pear, and in the opinion of Mr. Quinn, who had seen the same varieties in California, nothing there would equal these Delaware Bartletts in size and beauty. The Lawrence pear, both in growth of tree and size of fruit, was thought to be unusually successful, trees of six years' age fully showing as vigorous a condition and as large a size as those trees of twelve years' age nearer New York.

#### Pear Orchard on the Grass System.

On the grounds of the Agricultural College Farm at Newark, is an experimental farm and fruit garden under the direction of Prof. E. D. Porter. Here is a pear orchard of one thousand trees, planted ten years ago. The ground was very thoroughly prepared and trees rightly planted. Since that time they have been cultivated entirely and literally in correspondence with the system of "grass cultivation" advocated in the *Gardener's Monthly*.

The entire orchard was permitted to run into grass. It was cut several times every year, and

allowed to rot on the ground. In addition to this, a good supply of well-rotted barn-yard manure was spread over the land as an annual top-dressing, and pains taken to secure a good, vigorous, healthy growth as far as possible.

But notwithstanding all this, the trees have in large measure died. More are dying, and of those that are left, the fruit is small and inferior. Prof. Porter considers the "grass system" a failure for any orchard. Ten years of experience entitles him to speak with authority, and he will plow up the soil this fall with hope of saving the balance left alive. There is a fine vineyard in connection with the farm, and out of a large number of varieties planted, the best are the Concord, Hartford Proflific and Clinton.

#### Large Peach Farms.

Near Middletown several large peach farms were visited. The farm of the late Cantwell Clark contains one thousand acres, two hundred and eighty of which are devoted to peach orchards, and the balance to corn, wheat and grass, all managed entirely by a young lady only twenty-one years of age.

The farm of J. T. Ellison contains a peach orchard of one hundred acres, trees varying from two to eighteen years of age. Mr. B. T. Biggs, U. S. representative to Congress, has orchards containing thirty-five thousand trees. These are divided over four farms. Most of them are rented to tenants who keep the farms in excellent order. While the present low prices of peaches were discouraging most growers, Mr. Biggs still felt hopeful, for, in his opinion, a profit of but fifteen cents per basket would net the grower as much money per acre as hay or grain farming.

The farm of J. B. Fennimore, which for years has been one of the largest and most successful and most profitable in the State, was this year only bringing him a profit of but fifteen cents per basket for his fruit, and most of it was his choicest.

The orchards near Middletown are in fine condition, the land being heavier and trees more productive than at points further south, but not as finely colored, nor as early as at Dover. The peaches are picked from the tree by laborers from Philadelphia and Baltimore. Their wages are \$1 to \$1.25 per day, and board. Good pickers will average from forty to fifty baskets per day. Some prefer to pick by the basket, and receive five cents per basket, and make \$2 per day, others \$3.

The farm of Samuel Townsend, near Smyrna, contains four hundred acres, and he ships usually three cars of fruit per day.

Near Smyrna are the farms of four brothers, George Cummings and three others, who have been



most successful in the management of their fruit, and have accumulated large fortunes

On the farm of Robert Cummings is a fine apple orchard, the leading variety of all, "English Red Streak," having an unusual quantity of fruit upon it. This apple is one of the most popular in the State. Mr. Peters thinks the very early varieties profitable, such as the Golden Sweet, Early Harvest, and Red Astrachan. These four brothers have together one thousand acres, and one hundred thousand peach trees. As an instance of the fluctuation of prices, one of the brothers (as stated by Mr. Quinn) shipped fourteen hundred baskets one day to market, and when the account of sale was returned to him, found only a net profit of three cents per basket. Owing to the low prices, thousands of bushels were not picked, and left to rot on the trees in nearly every orchard on the Peninsula. One grower near Mount Pleasant lost ten thousand baskets of peaches in this way.

At Round Top, Md., is the farm of John Harris, who has one of the largest peach orchards in the United States—one thousand and thirteen acres, nearly all in full bearing. All the crop is canned on the place. The canning factory is located in the centre of the orchard, and fruit brought right to it from the pickers. Five hundred women and girls are employed during the busy season, assorting and peeling and packing. They earn \$6 to \$10 per week. They get fifteen cents per basket for peeling and quartering the peaches and removing the pits. The daily work is about four thousand baskets, which make thirty thousand cans, and before the close of the season Mr. Harris expects his crop will fill one million cans. The canned peaches are sold in Baltimore and Philadelphia, bringing at wholesale \$1 25 per dozen cans of two pounds each, which is very low, the usual price being \$2 75 per dozen. Cans holding three pounds sell for \$1 more per dozen.

#### Osage Hedges.

Nearly all the farms are surrounded with Osage hedges, and the roads for many miles are bordered on either side with some specimen hedges of enormous size—all of them beautiful in extreme, especially in midsummer, when the *Scarlet Trumpet Creeper* opens its gorgeously crimson-colored flowers and runs over the hedge in its wildest profusion. At Massey's Cross Roads, Md., on the farm of D. J. Blakiston, is an Osage hedge of five miles; the annual cost of trimming and keeping in order being but \$26. This gentleman has a pear orchard of eight hundred trees, planted seven years, the fruit from which last year sold for \$750 net; but it was suffering badly from the frozen sap blight and fire blight. Other orchards in the neighborhood

were suffering so much from the same cause as to discourage all further planting.

#### The Biggest Peach Orchard in the United States

Is that of Colonel Edward Wilkins, who now has *thirteen hundred and fifty acres, with one hundred and thirty-six thousand trees.* The peaches from his orchard, which is located near Chestertown, Md., are packed in crates and sent to Baltimore by the Colonel's own steamboat, to one canning factory, who contracts for the whole crop. In 1869 they netted him \$1.10 per crate; this year only 35 cents, or 17½ cents per basket. Yet at this price he esteems it more profitable to grow peaches than to grow corn at the rate of sixty cents per bushel for a crop of sixty bushels per acre. Some of his trees, three years old, yielded him two crates to the tree. This is unusual, for a basket per tree is a fair average. Each crate holds two baskets.

#### A Profitable Peach Orchard.

A well known peach grower near Chestertown, favored the party with figures of his gross receipts from a peach orchard of three hundred and twenty-five acres, during a term of nine years. Trees in this orchard in 1862 were then but four years planted.

1862, gross receipts.....	\$12,600 00
1863, ".....	32,340 00
1864, ".....	32,339 00
1865, ".....	48,042 98
1866, ".....	16,804 00
1867, ".....	9,989 00
1868, ".....	1,350 00
1869, ".....	30,429 00
1870, ".....	22,000 00
In these nine years, value of brandy made.....	15,150 00

Total.....\$231,043 98

More than half of this went for expense of marketing and gathering; the rest was profit.

The trees in Delaware orchards are usually planted 20 by 20, giving 108 trees to the acre. The third year from planting they begin to bear, and continue fifteen or twenty, if well cultivated. Once a year they are wormed, and branches are thinned out after each crop. Shortening or pruning the tops is practiced only among a few first-class growers, who believe in it; and some are trying the plan of growing low heads, which is not fancied by the majority, yet it forms a self-protection.

#### Pear Orchards.

Mr. R. S. Emory, near Chester River, Md., has a pear orchard of six thousand trees. Four rows of Duchesse, six years old, are stated by Mr. Quinn to be, both in growth of tree, size, uniformity and quantity of fruit, far ahead of anything he had beheld in the State.

Dr. C. H. V. Massey, near Massey's Cross Roads, has also a pear orchard of several thousand trees, but the blight was playing sad havoc in almost every orchard, and pear growers felt dispirited.

**List of Peaches Usually Planted.**

Peach growers now usually choose a list like the following, named in the order in which they ripen: Troths' Early, Large Early York, Crawford's Early, Crawford's Late, Reeves' Favorite, Ward's Late Free, Oldmixon Free, and Beers' Smock. The finest of all the peaches are the Crawfords and Oldmixon, the last perhaps the choicest in flavor. The Susquehanna is the largest grown, but not productive, single peaches often measuring nine to ten inches in circumference.

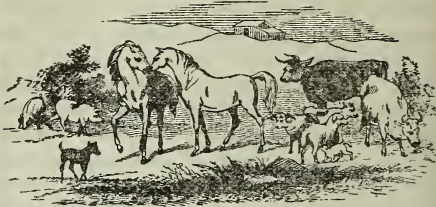
The Hale's Early is now very unpopular among the growers, on account of its tendency to rot on the trees before ripening, and is too tender for shipping. Mr. Quinn, to whom we are indebted for notes of this excursion, states that fully *one million* more trees will be in bearing next year over those of this year, and low prices may be expected to continue for several years to come, and the lot of the peach growers both very hard and unprofitable. The net prices of peaches this year range only from ten to twenty-five cents per basket. All the excursionists unite in expressions of delight at the beauty of the country visited. The farms are large, and as the land is level, or slightly rolling and uneven, orchards reach on every side, and the country has one uniform handsome appearance.

The system of hedges of the Peninsula adds to the beauty of the farm, and excites the admiration of the visitor. During the ride of one hundred and forty miles in their carriages, the excursionists saw more than thirty miles of Osage hedges, either facing the roads or dividing lines for one farm from another, forming at four years old not only fences of great size, but of utility, for they are completely impenetrable by cattle or pigs.

Fruit culture in Delaware and Maryland is on a more colossal scale than ours Northern readers have any possible idea of, yet it will be seen that like fruit grown everywhere, there are discouragements at almost every step. Still, like all occupations, after good lively competition, fruit growing becomes at last a settled occupation, and after "fevers" are over, there is a permanency to the trade, and a healthy increase in demand year after year.—*The Horticulturist*.

**THE DELAWARE GRAPE**—This, to our fancy, almost the best hardy grape in the market, says the *Practical Farmer*, always attractive, with its compact bunches, clear color, and fine flavor, has one drawback: it is in many locations a poor grower.

A medical friend of ours in Philadelphia, advises us of his great success in remedying this, by inarching it on Rogers' 15, a very vigorous grower. The Delaware, on this stock, made a growth of nine feet the first season. The Clinton, or any other free-growing variety, on which the Delaware may be worked, may remove the only objection ever made to this very popular grape.

**Live Stock Register.****COOKING FOOD FOR ANIMALS.**

Much is said just now about the great advantages of cooking food for animals, but we greatly doubt if sufficient experiments have been made to confirm the reasonings of scientific research so fully as to cause farmers generally to abandon the usual course of feeding, and resort to cooking all food given to their farm stock. The subject is one of great importance, and is one upon which we need the united experience of men of science and men of practice combined, until facts enough are established to guide the farmer and the stock feeder, in the profitable, healthy and economical management of his domestic animals.

The London (Eng.) *Country Gentleman's Magazine* has recently published an article disapproving of the practice of cooking food for farm stock, from which we make the following extract:

"Thorough mastication of food is recommended as all-important, but it must be remembered that cooked food rarely calls forth the necessary process, and no amount of cooking will render food more nutritious. Mastication is necessary for two purposes—to break down and saturate the food with an important fluid—the saliva, that fluid effecting important changes in the nutritive elements to fit them to undergo subsequent actions by other juices of the digestive organs. It is not possible to supplant these secretions by any process of preparation by cooking or addition of fluids. Dame Nature has supplied vegetable food for every season, and only requires of man that he should observe the peculiarities of each, and give the benefits to animals as far as possible. It is a decided mistake to cook the food of animals when it is sound and sweet. The mistake, so called, of supplying the dry food in winter, is more apparent than real. The exercise of common sense is called for in order to regulate the practice with suitable roots, and proper shelter and warmth, more than is usually done. It is a mistake to neglect the young stock so much as is commonly done. If more attention were paid to them, and the supplying of artificial food increased during the period



of their most active growth, adverse states would not be so general, and the remedy less sought after in useless preparations of food which run into expenses. Among working horses the effects of cooked food are something marvellous. Cholic, and indigestion generally, with disease of the liver and kidneys, is of common and fatal occurrence. It may be more easily understood to say such preparations are quite unnatural, as the digestive organs are constituted to act upon the most nutritive grains. It is also commonly believed that animals, especially horses, pass much away by the bowels that ought to be digested and appropriated to the system. This question requires more philosophical research before it can be definitely and accurately settled, but we can go so far as to say that when the masticatory organs are in good order, and digestion perfect, a proper allowance of food is thoroughly assimilated. Apparently whole grains may be found in the excrement, but upon close examination they will turn out to be the *shells only*, which by the action of the digestive juices, have been divested of their internal nutrient parts. Some persons look upon digestion as a process in which everything must be utilized for the building up of tissue. They forget it is quite as essential that other substances should be present—those non-nutritious in themselves, but by their constitution and presence give bulk to the rest, and assist in their general reduction in the stomach of the higher animals, exactly as the sand and pebble act in the crops of birds. The success of feeding our domestic animals does not lie in the way of cooking food and administration of condiments, but in a judicious management generally, in which the peculiar features of organization, physiology, geology, meteorology, and hygienics, play their respective parts, and agricultural success will never be certain until these branches of science are more definitely acknowledged."

### SHELTER FOR HOGS.

A J. H., a correspondent in the *Western Rural*, gives the following :

Having noticed several articles, and some of them accompanied with drawings and plans for sheltering hogs, I will give you my method. I have lived in northern Illinois for over twenty years, and had some experience in wintering stocks of all kinds. My plan for a hog shed is simple and satisfactory, at least to myself. It is proper to remark that I live on the east side of a grove. I take two forked posts and set them in the ground, leaving them about four feet above the surface; next, I put on a ridge pole, and then get some pieces of plank, or scantling, or slabs six or seven feet long, and set them slanting from the ground on each side, and

let the ends meet on the right pole; cover them with straw, or anything that will not let the dirt fall through, and then put a thick covering over this, of earth. I dig a trench around this shelter, to keep out water. The shelter should face to the south or east, and be ventilated about the middle. For this purpose I use a small piece of stove pipe.

In the fall, I gather up forest leaves and fill it up. The hogs work them up among the dry earth and form a dust. This is all they want. In the coldest weather they will come out dry and comfortable.

I have tried different ways of wintering hogs, but have found nothing yet equal to this plan.

### RULES FOR THE CARE OF SHEEP.

Keep sheep dry under foot with litter. This is even more necessary than roofing them. Never let them stand or lie in mud or snow.

Drop or take out the lowest bars as the sheep enter or leave a yard, thus saving broken limbs.

Begin graining with the greatest care, and use the smallest quantity at first.

If a ewe loses her lamb, milk her daily for a few days, and mix a little alum with her salt.

Give the lambs a little mill feed in time of weaning.

Never frighten sheep, if possible to avoid it.

Sow rye for weak ones in cold weather, if you can.

Separate all weak, or thin, or sick, from those strong, in the fall, and give them special care.

If any sheep is hurt, catch it at once and wash the wound with something healing. If a limb is broken, bind it with splinters tightly, loosening as the limb swells.

Keep a number of good bells on the sheep.

If one is lame, examine the foot, cleanse out between the hoofs, pare the hoof if unsound, and apply tobacco with blue vitriol boiled in a little water.

Shear at once any sheep commencing to shed its wool, unless the weather is too severe.

### TO OUR FRIENDS.

Our friends everywhere are requested to present the claims of the *Maryland Farmer* to their neighbors. There are hundreds of farmers in and out of our State who are not now subscribing to any magazine devoted to agriculture and its kindred sciences, but who could be easily induced to do so, if the character of our monthly were properly presented to them. If each of our present readers were to secure only one new subscriber for 1872 they would not only be rendering us a great service, but advancing the interest of agriculture. We ask each of them to make the effort between this and December next. Single copies, \$1.50—five or more, \$1 each.

## Ladies Department.

### BY CANDLE LIGHT.

During the season at Saratoga, the gas gave out, and society had to depend upon tallow dips. Listen to the scene as described by a correspondent:

It was ten o'clock. The stage drove up from the depot. Almost every lady expected her husband on the train. Many young ladies expected their sweethearts. Neither the stage, driver, nor the horses were visible. From force of habit the passengers felt their way to the reception-room. I got mixed up in the crowd. Twenty-five married ladies, seven old maids, and four young ladies commenced greeting the passengers in the darkness. "My dear William! why did you stay so long?" exclaimed a sweet young wife, and then she threw her arms around my neck, our lips met. I wasn't going to be a darned fool.

Far different.

Now, a dear, sweet, liquid-eye brunette threw her arms wildly around me. "O, Eugene, why did you not write oftener?" she sobbed, and then she sank sweetly on my bosom. I said, "weep not, Julia," and then kissed her twenty-two times. It was delicious. It made me think of my first wife and my college days at Yale.

A sweet, golden-haired blonde now took my hand. She pressed it gently, saying: "Dear Albert, I know it is you, and I'm so glad to see you! You won't dance with Lizzie Smith; now, will you? Now, do you promise me?" I said I wouldn't. Then she held her cheek close to mine. It was hot with love's young hope, and pure, sweet affection. We were very happy. None but a wicked man would have brought sadness to this sweet, pure affection, and beautiful with splendid girlishness.

"Do you still love me, Albert?" she whispered.

"Undoubtedly," I remarked.

"How much, darling?"

"A heap."

"O, I am too happy," she murmured, as she twisted her fingers in my auburn hair and held me in a sweet embrace.

This sort of thing went on for seventeen minutes, when C. Leland appeared in the distance with a tallow candle. I quietly withdrew and mingled unobserved in the crowd. As the candle appeared, twenty-seven young gentlemen were seen shaking hands with as many young ladies in the different corners. I have seldom seen such an affecting scene. It was a great display of affection. And one married gentleman was holding the hands of two ladies. The hair of the ladies was generally crimpless, while the hair of the young gentlemen did not display a parting place. I reflected, "how kin such things be, and overcome us like a summer shower?" I consulted with J. Billings. He says they can't. So I resolved to leave the place.

There can be no Christianity where there is no charity, but the censorious cultivate the forms of religion that they may more freely indulge in the only pleasure of their lives—that of calumniating those who to their feelings add not the sin of hypocrisy.

Memory preaches over the past; action over the present. The first lives in a temple hung with glorious trophies, and lived with tombs; the other has no shrine but duty, and it walks the earth like a spirit.

The head truly enlightened will presently have a wonderful influence in purifying the heart; and the heart really affected with goodness, will much conduce to the directing of the head.

### WHAT IT IS TO BE A WIDOW.

"I think it must be a jolly thing to be a young widow!" I heard this remark the other day, in a group of laughing girls. I think I remember saying such a thing myself in my girlish times. Do you know, girls, what it is to be a widow? It is to be ten times more open to comment and criticism than any demoiselle could possibly be. It is to have men gaze as you pass, first at your black dress, and then at your widow's cap, until your sensitive nerves quiver under the infliction. It is to have one ill-natured person say, "I wonder how long she will wait before she marries again?" and another answer, "until she gets a good chance, I suppose." It is now and then to meet the glance of real sympathy, generally from the poorest and humblest woman that you meet, and feel your eyes fill at the token, so rare that it is, alas! unlooked for. It is to have your dear fashionable friends console you after the following fashion: "Oh, well! it is a dreadful loss. We knew you'd feel it, dear." And in the next breath, "You will be sure to marry again, and your widow's cap is very becoming to you."

But it is more than this to be a widow. It is to miss the strong arm you have leaned upon, the true faith that you knew could never fail you, though all the world might forsake you. It is to miss the dear voice that uttered your name with a tenderness that none other could give it. It is to hear no more the well-known footsteps that you flew so gladly once to meet. To see no more the face that to your adoring eyes, seemed as the face of the angels of God. To feel no more the twining arms that folded you so lovingly; the dear eyes that, looking into your own, said plainly, whatever it might seem to others, yours was the fairest face earth held for him. It is to fight with a mighty sorrow as a man fights with the waves that overwhelm him, and to hold it at arm's length for a while, only to have—in the hours of loneliness and weakness—the torrent roll over you, while—poor storm-driven dove—you see no haven.—N. F. Home Journal.

### A HAPPY WOMAN.

What spectacle more pleasing does the world afford than a happy woman contented in her sphere, ready at all times to benefit her little world by her exertions, and transforming the briars and thorns of life into roses of Paradise by the magic of her touch? There are those who are thus happy because they cannot help it—no misfortunes dampen their sweet smiles, and they diffuse a cheerful glow around them, as they pursue the even tenor of their way. They have the secret of contentment, whose value is above the philosopher's stone; for without seeking the baser exchange of gold, which may buy some sorts of pleasure, they convert everything they touch into joy. What their condition is makes no difference. They may be rich or poor, high or low, admired or forsaken by the fickle world; but the sparkling fountain of happiness bubbles up in their hearts, and makes them radiantly beautiful. Though they live in a log cabin, they make it shine with a lustre that Kings and Queens may covet, and they make wealth a fountain of blessing to the children of poverty. Happy women are the highest types of humanity, and we cannot say how much we owe to them for the progress of the race.

REMEDY FOR CATARRH.—Take half a teacup of blood warm water and dissolve sufficient salt in it so that it can be plainly tasted. Then pour in the palm of the hand and snuff into the nostrils. Two applications a day will soon produce good results.



## DOMESTIC RECIPES.

**TURKEY TO ROAST.**—Dress in the usual way, but remove the crop with the fingers at the neck without cutting. Cut as small a place as will do to remove the inwards. Prepare a stuffing by cutting in small pieces half of the neck-bone, liver, gizzard, heart, and a slice of pork; boil half an hour in a quart of water and season with salt and pepper; add to this half a loaf of wheat bread sliced thin and rubbed fine. Wash the fowl, and while wet rub salt and pepper over it with your hand. Tie the neck and put the stuffing in at the other opening, pushing enough of it through into the crop to fill. When full sew up the opening, put the fowl in a dripping pan with a pint of water, roast in the oven about two hours, turning carefully once or twice, and dipping the water over it frequently. An old turkey or a hen should be cooked about half a day.

**FLOUR PUDDING.**—Take one quart of sweet milk, one teaspoonful salt, half a teacup of sugar; mix, boil and thicken with one teacup of wheat flour, wet with cold milk and stir until it boils again, then remove from the fire. When half cold add two well-beaten eggs, and flavor with nutmeg or lemon. Add raisins if you choose. Bake half an hour. To be eaten cold, with or without sweetened cream.

**CHEAP TEMPERANCE MINCE PIES.**—Take of boiled beef, chopped fine and salted, one pint; apples, chopped fine, one quart; butter or suet, one teacupful; one teacup sugar, one pint each of boiled cider and water. Stew all together until the apples are done. When cold add one pint of canned or stewed blackberries or raspberries, one teaspoonful of pepper, one of cloves, two of cinnamon and two of allspice.

**COOKING PEAS.**—Put several salad leaves that have been dipped in water, in the bottom of a vessel; wash the peas and lay them on the leaves, add  $\frac{1}{2}$  lb. of butter to half peck of peas (no water), cover them and stew half an hour.

**VARIETY CAKES.**—Take two eggs, half a cup of sour cream, half teaspoon saleratus, a pinch of salt; mix with flour; roll out thinner than pie-crust, large as a saucer, and fry in hot lard as you do fried cakes.

**SCOTCH STEW.**—A neck and breast of young mutton, a few tomatoes skinned, a little onion, a few potatoes and a small carrot, all cut up fine; season with pepper and salt and let it stew four hours.

**BOWMANDALE PUDDING.**—Our venerable housekeeper concocts a pudding so delicious that I would fain give to your department the method of its make-up. Place two quarts of fine white cornmeal in a tin-pan, season properly with salt, grate half a large nutmeg, add half a teaspoonful of soda and mix together well. Beat up the white and yolks of four eggs with considerable white sugar until the mass is very light, and add it to the meal with sufficient unskimmed milk to form a very stiff batter. Place in a bag and boil briskly till done. Serve hot with wine dressing. Any palate not blasé will be tickled if this pudding collides with it.—*Cor. Germantown Telegraph.*

**HOW TO COOK OLD FOWLS.**—For the possible benefit to some other young housekeepers, I wish to tell them how to cook an old chicken. Prepare as for roasting, then boil three hours in a covered pot, with one quart of water, to which add two tablespoonfuls of vinegar; after which put into a pan in a hot oven for about one hour, to brown. The liquor in the pot to be prepared for gravy; should the water boil away too much, more should be added. The result is, the meat is as tender as young chicken, and some think richer and better.—*Ohio Farmer.*

## The Dairy.

## GRASSES FOR BUTTER FARMS.

Before entering upon the question of butter manufacture and factory management, it will be proper to say a word concerning the food of stock. The excellence of "fancy butter" does not depend altogether upon its manufacture, for in the first place good milk must be secured.

"Fancy butter," that will sell for a dollar per pound, cannot be made from bad material, from milk produced on weedy pastures, or upon the rank, sour herbage of swamps, or upon land newly seeded with red clover. The experienced butter dairymen, therefore, pay much attention to the feed of their cows, and prefer old pastures.

On the old pastures of the butter district, there are several varieties of grasses that spring up spontaneously, and are much esteemed as affording sweet and nutritious feed, from which the best qualities of milk and butter are produced. These grasses form a dense solid turf, leaving no intervening spaces—They embrace the June, or blue grass (*Poa pratensis*,) the fowl meadow grass (*Poa serotina*,) meadow fescue (*Festuca pratensis*,) red top (*Agrostis vulgaris*,) the wire grass (*Poa compressa*,) the sweet scented vernal and vanilla grass, together with timothy (*Phleum pratense*,) orchard grass (*Dactylis glomerata*,) clover and other forage plants.

The June grass (*Poa pratensis*) is regarded as very valuable; it throws out a dense mass of leaves, is highly relished by cattle, and produces milk from which a superior quality of butter is made. It is found growing throughout the butter districts of the country. The wire grass (*Poa compressa*) is deemed one of the most nutritive of the grasses; is very hardy, eagerly sought after by cattle, and is one of the best grasses for fattening. Cows feeding upon it yield milk of the richest quality, from which the nicest butter is made. It flourishes well upon gravelly knolls and in shaded places, and its stem is green after the seed has ripened. It is found growing in all parts of the country.

The meadow fescue is common in old grass lands where the sod is thick, and grasses of different varieties are mingled together. It starts up early in the spring, is relished by stock, and furnishes good early feed. The milk farmers hold it in high estimation as a reliable grass, tenacious of life, and not running out like timothy (*Phleum pratense*) or clover. The white clover (*Trifolium repens*) springs up spontaneously in the old pastures, and is highly esteemed as giving flavor and quality to butter.

The sweet scented vernal grass grows best upon the moist soil of the old meadows. It starts very early, and gives off an agreeable odor.

We have been particular in naming the grasses which are most esteemed for producing a high priced butter, because a record of long and well conducted experiments has proved their utility. It is possible that climate and soil might so modify the character of these grasses, as to render them less worthy of esteem in other countries than among the butter dairymen of New York. Still as the experience of farmers noted for their success in a particular direction, is more or less suggestive and valuable, we give the record as it is.—*A. A. Willard.*

### A NEW SELF-RAKER ATTACHMENT TO KIRBY'S REAPER AND MOWER.

From the time of the introduction of the first practical machine for harvesting grain, inventors have had their wits at work to produce an attachment which would remove the grain after being cut by the Reaper, in good shape for the binders.

Much time and money have been spent, and no pains spared to make this Attachment a success. It having been found more difficult to make a Self-Rake which would meet the demand of the farmers, and dispense with the extra man upon the machine, than to construct the Reaper itself. A Self-Rake, to perform its work properly, must in its movements resemble as nearly as possible the motion of the human arm. The production of such movements has required complicated mechanism, and although the Rake might give satisfaction in the performance of its work, it has frequently been the case that the farmer, after a short experience, has discarded the automatic delivery, and substituted a hand Raker, preferring to pay the extra expense of another hand to the trouble and loss of time occasioned by the frequent breakage of some part of the necessarily complicated mechanism.

We have lately seen on exhibition at the Maryland Institute Fair an invention which appears to possess all the necessary features of an Automatic Rake, and at the same time obtain the desired movements from a very simple combination of mechanism.—Mr. John C. Durborow, formerly of Howard Co., Md., after a series of experiments extending over a period of some eleven years, has succeeded in producing a SELF-RAKE FOR REAPERS, upon an entirely new and original principle. This Rake is attached to the "Kirby" Reaper, manufactured by D. M. Osborne & Co., of Auburn, N. Y., who, after a thorough trial, have made arrangements with the inventor for the exclusive use. The principle of this invention is the combination of a fixed and revolving wheel, dispensing entirely with cams, friction rollers, springs, chains, and other complicated devices which have hitherto been so objectionable. The motion of the Rake is very peculiar; it is attached directly to a bevel gear wheel, which traverses a fixed wheel of the same dimensions, making one revolution about its own axis whilst revolving around the fixed wheel. This rotary motion imparts to the rake an easy and graceful rolling movement just at the moment of the delivery of the gavel. It is an exceedingly simple and ingenious device, and seems to possess all the requirements of a Self-Raking Attachment. From its appearance we should judge it to be strong and durable, and not liable to vex the farmer by breaking just in the midst of harvest.

We noticed also several improvements in our old friend, the Kirby, to which this new rake is attached. It has a new lifting lever, arranged within easy reach of the driver, who can, whilst reaping, raise or lower the machine at will. This is an important feature, and enables him to instantly drop the cutter bar, to secure down and lodged grain. There is also an improved castor wheel at the grain side of the platform, which admits of the machine being easily turned at the corners. A personal inspection of the Improved Kirby, with the new Self-Raking Attachment, will give our readers a better idea of its merits than any further description. It can be seen at 59½ S. Charles Street, Baltimore, Md., where Mr. Durborow, the inventor, and agent for the sale of the Kirby Reaper and Mower, will take pleasure in showing the peculiar features of this important improvement. The machine on exhibition was used last season by Mr. Hammond Dorsey, a well-known farmer of Howard County, Md., who speaks in high terms of its satisfactory performance.

**HOW TO EXTRACT COFFEE**—If coffee, after roasting, were made as fine as flour by pounding in a mortar, it could be extracted so much better as to require no more than two-fifths as much as if it were only coarsely ground. An equally strong extract can be made by allowing water to stand on the grounds, as by giving it a boil or by filtering through it. The latter method is the true one for retaining all of the aroma. When coffee beans are roasted, an empyreumatic oil is produced, which, being very volatile, is expelled if the coffee extract be boiled. It is better to make the grounds, as fine as flour, and to extract by filtration and never to boil.

**HORRIBLE DEATH OF A MAN FROM THE GLANDERS**—One of the most horrible cases of glanders in a human being of which we have ever heard occurred in the neighborhood of Weyerton a week or two since. A man while attending to a horse got some of the virus from the nose or mouth of a glandered horse into a cut upon one of his thumbs, and a short time thereafter was taken with frightful spasms, succeeded by fearful sickness and prostration. Medical assistance was obtained, and, although every reasonable attention was given the man, (notwithstanding the report that he was deserted by his neighbors,) he died in a most horrible manner some six or seven days afterwards. His body became a mass of ulcers, and at the time of dissolution the flesh literally fell in pieces from the bones. This is one of the most dreadful cases on record.

**ITCH.**—Dr. W. W. Hall says that the itch can be cured by keeping the itching parts covered with sweet oil. The infinitesimal animals are thereby smothered to death.





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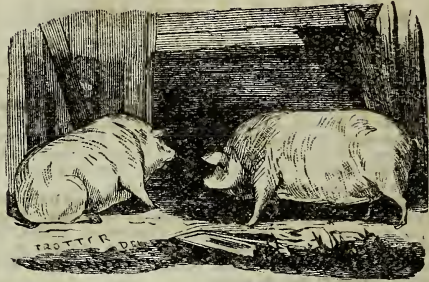
**KEMP & KERR,**  
Denton, Caroline Co., Md.



THE BEST INVESTMENT a farmer can make. Saves from 4 to 6 profits between his wool and cloth. Makes every article of knit goods needed in a family. No wide-awake farmer can afford to be without one. For circulars and samples address LAMB KNITTING MANUF'G CO., Chicopee Falls, Mass.

oct-9t

## PREMIUM CHESTER WHITES A SPECIALTY.



JERSEY, AYRSHIRE, AND SHORT HORN CALVES, SOUTH DOWN AND COTSWOLD SHEEP, imported BERKSHIRE AND YORKSHIRE SWINE, 12 VARIETIES OF POULTRY *all pure bred*

Send stamp for descriptive Circular and Price List. Address FRANCIS MORRIS, Importer and breeder of Improved Live Stock, No. 18 North 13th St., Philadelphia, Pa.

oct-3t

## ERCILDOUN & COATESVILLE NURSERIES.

20 000 APPLE TREES, 3 and 4 year—best varieties.  
75 000 PEACH TREES, 1 year, "  
15 000 CHERRY TREES, 1, 2, and 3 year, "  
5 000 STANDARD PEAR, 2 and 3 year, "  
10,000 DWARF PEAR, 2 and 3 year, "  
5,000 PLUM, 1 and 2 year, "  
200,000 CONOVER'S COLOSSAL ASPARAGUS.  
200,000 OSAGE ORANGE.

All the above at reduced rates. Send for Price Lists.

LUKENS PEIRCE,

Coatesville, Pa.

oct-2t

## FOR SALE

AT THE

## Ercildoun and Coatesville Nurseries,

A large and fine assortment of

FRUIT TREES and SMALL FRUIT PLANTS.

*Catalogues and Price Lists Gratis.*

Orders promptly forwarded.

**LUKENS PEIRCE,**

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oct-2t

## OSAGE ORANGE.

100,000 1 year PLANTS—medium size.  
100,000 2 year PLANTS—large size.

For Price List, address

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oct-2t



Every Sower of Grass Seed or Grain should have a

**CAHOON**

Hand Broadcast

**Seed Sower.**

This machine will sow *Fifty Acres* of Wheat in ten hours, and do the work with greater precision and accuracy than it can be done by any other machine. PRICE \$10.



**INGERSOLL'S  
HAY AND COTTON PRESSES.**

Unequalled for strength and rapidity of operation.

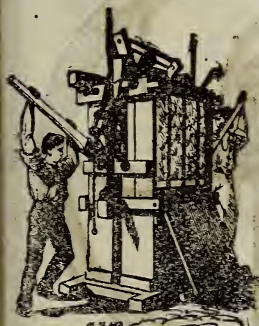
Circulars to be had upon application.

**SPEAR BROTHERS,**

Manufacturers' Agents.

oct-2t

21 S. Charles Street, Baltimore, Md.



THE GREAT NEED OF THE SOIL  
IS POTASH.

150 TONS

**GERMAN POTASH SALTS,**

For fertilizing purposes, containing 28 to 30 per cent. Sulphate of Potash; also, Sulphate of Magnesia, and other fertilizing elements, *but no sand or dirt*—the very best article for mixing with Bone Dust or other Fertilizers, or with Stable Manure.—Imported and for sale in Bags, at \$45 per ton, (2,000 lbs.) by

**Charles L. Oudesluys,**  
NO 67 EXCHANGE PLACE,  
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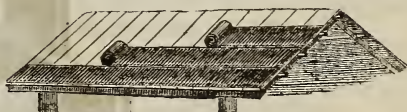
Also, Muriate of Potash, and concentrated Ashes, or Periscator.

50,000 tons of Kainit are used annually by European Agriculturists. oct-2t

**APPLE SEEDLINGS**

In large quantities at the lowest rates. See Price List. oct-2t  
W. F. HEIKES, Dayton, Ohio.

**ASPHALTIC  
ROOFING FELT.**



This Felt is thick, durable and cheap. Coated ready for immediate use. Can be applied by inexperienced hands. Send for circular. Tarred and Dry Roofing Paper; Slating Nails Pitch, &c.

For sale by **MERCHANT & CO.,**  
jy-1y 507 MARKET STREET, PHILADELPHIA.

**ANDRE LEROY'S  
NURSERIES,**

ANGERS, FRANCE,

*The Most Extensive in Europe.*

For Catalogue apply to

**BRUGUIERE & THEBAUD,**

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P. O. Box 15.

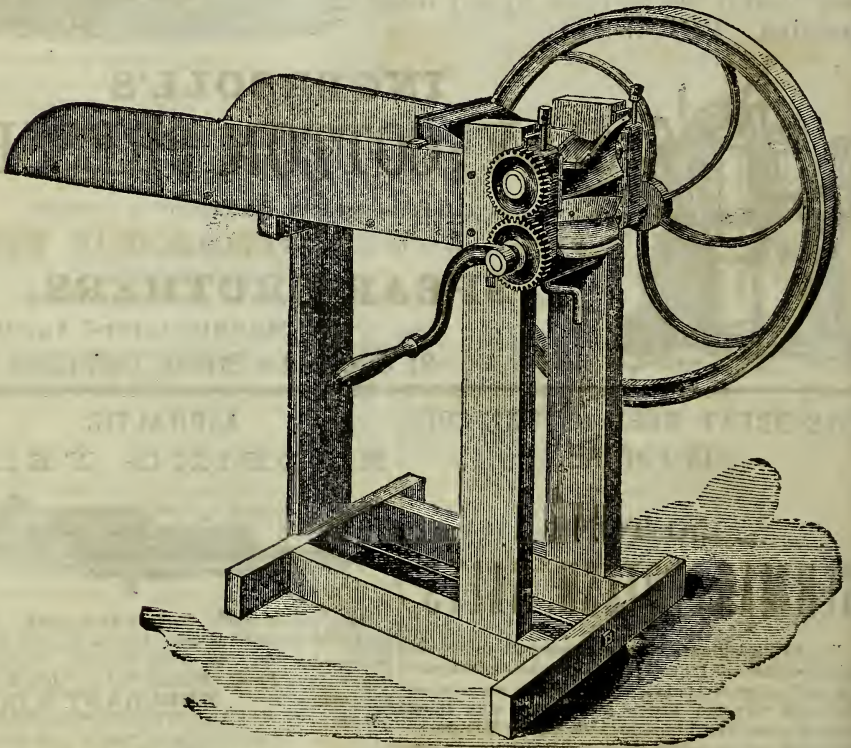
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NEW YORK.

**VINEGAR**—how made—of Cider, Wine, or Sorgho, in 10 hours. F. SAGE, Cromwell, Conn. sep-1t

# COPPER STRIP FEED CUTTER.

IT TOOK TEN YEARS TO BRING IT TO PERFECTION.



It is now less in price and will do double the amount of work of any other Feed Cutter in use, and with more ease.

There is no longer any necessity for farmers doing without Feed Cutters, as we have ten sizes, from \$10 to \$40, and all warranted perfect.

As the demand is greater than can be supplied, we would advise dealers to order early.

**E. WHITMAN & SONS,**

Nos. 145 and 147 WEST PRATT STREET,

Opposite the Maltby House,

BALTIMORE, MD.



**HENRY GIBSON,**

MANUFACTURER OF

**TUBULAR DRAINS,**

IN GLAZED STONEWARE.

ALSO,

**DRAIN TILES.**

LOCUST POINT,

Baltimore.

apr-6m



**BELMONT**



**STOCK FARM.**

I am breeding thorough bred Horses, the Imported Percheron Norman Horses, and the Black Hawk Branch of the Morgan Stock, for sale. Also Pure bred Short Horn Cattle, Chester White and Albemarle Improved Swine, (the latter a cross of Woburn and Chester Whites,) and Braham Fowls for sale.

S. W. FICKLIN,

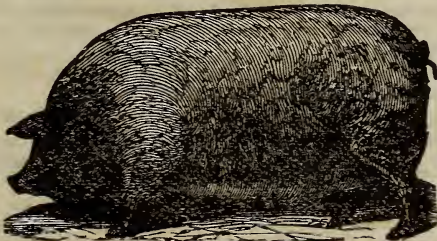
near Charlottesville, Va.

june-1y

**WILLIAM LINEKER,**  
**Landscape Gardener,**

wishes to notify the public that he is prepared to LAY OUT NEW GROUNDS in the neatest and newest styles and on most reasonable terms. All kinds of Garden Work, including Cemetery Lots, &c., will receive prompt attention, and be executed with practicability. In view of our long experience as a practical Gardener, we can guarantee satisfaction to all favoring us with orders. All kinds of PLANTS and TREES at Nursery prices. Residence—41 PENN STREET.

**PREMIUM CHESTER WHITES,**  
**BERKSHIRE AND ESSEX PIGS.**



Bred and For Sale by

**GEO. B. HICKMAN,**

WEST CHESTER, CHESTER CO., PENN.

Send for a Circular and Price List.

sep-3t

**NEW AND RARE PLANTS.**

The subscriber offers for sale on the most liberal terms many new

**HARDY EVERGREENS,**

of unsurpassed beauty. Also, a large collection of HOT and GREENHOUSE PLANTS, selected while in Europe, and still quite rare here. Also, everything worthy of notice, with Cut Flowers, Boquets and Plants for Decorations furnished on the lowest terms.

**JOHN FEAST, Florist,**

295 Lexington Street,

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P. S.—Having assumed the business of JOHN FEAST & SONS, it will hereafter be carried on in my own name. All orders will be punctually attended to for cash, or satisfactory reference.

jan-tf

**JOHN FEAST.**

**IRON AND WIRE**  
**FENCES.**

Iron Ox Hurdle Fence, Iron Sheep Hurdle Fence, Wire Webbing for Sheep and Poultry Yards, Iron Farm Gates, Guards for Stable Divisions, Store Fronts, Factories, &c., Tree Guards, ORNAMENTAL WIRE WORK for Porches, Green Houses, &c.; WIRE RAILING for Cottage, Garden and Cemetery enclosures; Mosquito Netting and every variety of WIRE WORK. Every information furnished by manufacturers.

M. WALKER & SONS,

feb-1y No. 805 Market street, Philadelphia, Pa.

**WATER**

**POWER PLEDGED**

Equal to any OVERSHOT, with  
N. F. BURNHAM'S

**NEW TURBINE.**

Illustrated, Descriptive Pamphlet and Price List, for 1871, sent free by N. F. BURNHAM, York, PENNSYLVANIA. jy-6t

**WHEEL**

**A**

**GREAT CHANGE FOR AGENTS.**

Do you want an agency, local or traveling, with a chance to make \$5 to \$40 per day selling our new 7 strand White Wire Clothes Lines? They last forever; sample free, so there is no risk. Address at once Hudson River Wire Works, 130 Maiden Lane, cor. Water St. N. Y. or 16 Dearborn St. Chicago, Ill.

**START A NURSERY**

HOW TO.—Second

edition. Price 25c.

Price List of Trees, Plants, Seedlings, Root-Grafts, &c., free. HEIKES' NURSERIES, Dayton, O. (Established 1822.) oct-2t

CLEAN YOUR OWN SEED WHEAT!

# MONTGOMERY'S MAGIC PERFORATED ZINC REVOLVING SCREEN

Is acknowledged by all who have used it and all who have seen it work to be the most simple and complete machine which has ever been invented for preparing Wheat for Seed. It gives the largest and heaviest wheat for seed; is suitable for all kinds of wheat; takes all cockle out, from the smallest to the largest; does its work speedily, and takes only two men to work it.

**Every Farmer ought to have one!**

**Every Merchant ought to have one!**

**Every Miller ought to have one!**

N. B.—Buy one of these Screens, clean your own Seed Wheat, and stop raising cockle and cheat.

**Reasons why this Machine is so effectual:**

1. The perforations or holes being round, the cockle passes through more readily, whilst the wheat being long passes over. The holes are made large enough to let the largest cockle pass through.
2. The holes never fill up, which is not the case with the wire screen. Every farmer knows the difficulty in using wire screens when the cockle is large.
3. The Screen is made with spiral wires on the inside, which act as elevators and agitators, and prevents the wheat from laying in a body on the lower part of the Screen.
4. It is made in sections, and the box is so made that what passes through each section is discharged by itself and can be kept separate.
5. It is made to feed itself, and feeds fast or slow in proportion to the velocity with which it is turned, and stops feeding when it is stopped.

**Price of Screen for Farmers' use \$45.** Larger sizes for Mills, &c., at proportionate prices.

Below we give testimonials of parties who have used the Screens:

Messrs. E. WHITMAN & SONS.

*Gents:*—We take pleasure in stating that we have purchased and are now using one of "Montgomery's Magic Perforated Zinc Revolving Screens," and that it is the best machine for its purposes we have ever used, doing well all that it pretends to do.

Very respectfully yours,

I. M. PARR & SON, Commission Merchant,  
South Street, Baltimore, Md.

BALTIMORE, September 23d, 1871.

Messrs. E. WHITMAN & SONS.

*Gents:*—When purchasing, you requested us to write you as to the working of the "Montgomery Screen." We have had it out among several of our farmers, and it works admirably, freeing the worst wheat almost entirely of cockle, cheat and bad grains. We think it a valuable invention for preparation of Seed Wheat.

Yours, truly,

E. T. EVANS,  
Dealer in Grain, &c.

MIDDLETOWN, DEL., September 23, 1871.

Manufactured and for sale by

**E. WHITMAN & SONS,**  
145 and 147 W. Pratt St., Baltimore, Md.



# R. SINCLAIR & CO.

MANUFACTURERS OF

## AGRICULTURAL IMPLEMENTS AND MACHINERY,

GROWERS AND IMPORTERS OF

## GARDEN AND FIELD SEEDS,

## TREES, PLANTS, &C.

## 62 LIGHT STREET,

## BALTIMORE, MD.

Offer to the farmers of Maryland and the Southern States the following valuable Labor-Saving Implements and Machinery, the most of which are of their own manufacture, and are guaranteed to give entire satisfaction to the farmer and planter :

**"ADVANCE MOWER"** or **"IMPROVED MONITOR"**—the simplest, strongest and most efficient Mower in the country.

**"NEW YORKER"** Self-Rake Reaper and Mower, and REAPER only.

**"CHAMPION"** Reaper and Mower, with either Self-Rake or Dropper Attachment.

Maryland Sulky Self-Discharging HAY AND GRAIN RAKE—the best in use.

**"PHILADELPHIA"** HAND AND HORSE LAWN MOWERS. Warranted the best in use.

Rogers' Patent Harpoon Horse Hay Fork.

**"BUCKEYE"** SULKY CULTIVATOR, for working Corn, Tobacco and Cotton crops.

**SINCLAIR'S** Southern Iron-Brace Grain Cradles.

**"Scully's"** Patent CIDER AND WINE MILL AND PRESS COMBINED, unequalled for efficiency.

**THRASHERS AND SEPARATORS.** **"Geiser's," "Westinghouse's" "Wheeler's,"** and other first-class Cleaners.

**HORSE POWERS**—"Pelton's" Triple Gear, some 5 sizes. Spur Gear Powers, and other good varieties.

**"Sinclair's"** Patent Screw Propellers and Masticators, for cutting Corn Stalks, Hay and Straw for cattle feeding. These are the premium Cutters of this country.

**CORN SHELLERS**—All kinds and sizes, both for hand and horse power.

**SINCLAIR'S PATENT CORN PLANTER**, which plants the Corn any distance required, covers and rolls the land—the most perfect Planter of the day.

**GARDEN DRILLS**—"Comstock's," "Wethersfield," Planet and other Seed Drills.

**WHEAT AND GRAIN DRILLS**—"Bickford & Huffman's," "Wagoner's," "Buckeye," and all the best kinds made.

Lime Spreaders, Plaster Sowers, Hay Tedders, Grist Mills, Corn and Cob Crushers, Hay Presses, Iron Field Rollers.

Agents for **"Thomas'"** Smoothing Harrow, for cultivating Corn and Wheat lands.

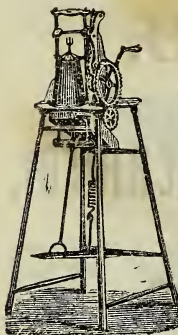
Wheat Fans, Pumps, Improved Churns, Horse Shovels, Plows, Harrows, Cultivators, all kinds and sizes. Plow and Machine Castings, Agricultural and Horticultural Hardware.

Address,

## R. SINCLAIR & CO.

No. 62 Light Street, Baltimore, Md.

## THE MARYLAND FARMER.



Best machine ever offered for paring, coring, quartering or slicing apples. Does the entire work expeditiously, promptly and well—separating core and parings from the fruit at once. Will prepare more fruit for drying, pies, or family use, than six of ordinary parers. For farmers it is indispensable. Fruit can be taken care of in season, instead of allowing it to rot in the orchard. Three times the price of parer can be saved on every crop. A barrel of apples can be got ready for pies in one hour, saving in labor alone, in a single year, many times the cost of the parer. Territory for sale. Agents wanted. Send for circular.

**TIPPECANOE APPLE PARING MACHINE CO., 49 Courtlandt St., N. Y. sep-3t**

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Life and Adventures of Robert Houdin, the most famous conjuror of the world, just commenced in No. 43 of HANEY'S JOURNAL, showing how, when a boy, he got his first lessons in magic, his youthful mishaps as an amateur, his amusing and thrilling adventures, how he invented and performed his marvelous feats, his great magical contest with the famous Arabian jugglers, &c. Every boy will long to read this fascinating narrative, and to give all the opportunity, HANEY'S JOURNAL, a handsome eight page (forty long columns) illustrated family paper, will be sent SIX months on trial to any new subscriber for 25 cts. JESSIE HANEY & CO., 119 Nassau-st., N. Y. Three splendid stories for boys just commenced; subscribe now and get them complete. Single copies of any newsdealer—none free—no premiums. tf

## AXEL E. STEINBACH, JUNCTION CITY, KANSAS, BUYS & SELLS ON COMMISSION

ALL KINDS OF

Nursery Stock, Seed, Pure Blooded, Imported and Fancy Animals, Fowls and Eggs. sep-tf

### HEIKES' NURSERIES.

A full stock for the Fall of 1871. Address for Price Lists, viz: No. 1, Descriptive; No. 2, Wholesale; No. 3, Dealer's Wholesale; No. 4, Retail. (Established 1822) W. F. HEIKES, Dayton, O. oct-2t

**TIN LINED LEAD PIPE.** PREVENTS LEAD POISONING.—Water flows through it as pure as if drawn through silver. It combines all the advantages of lead pipe as to strength, pliancy and durability; while as a Sanitary Safeguard it is invaluable. Price, 15 cents a pound for all sizes. Circulars and samples of pipe sent by mail free.

Address: **THE COLWELLS, SHAW & WILLARD M'F'G CO., 213 Centre-st., New-York.** je-tf



### PREMIUM Farm Grist Mill, SIMPLE, CHEAP AND DURABLE,

It is adapted to any kind of power, and grinds all kinds of Grain rapidly. Send for a descriptive Circular.

**WM. T. BOYER & BRO.**

2102 Germantown Ave.,  
Philadelphia, Pa.

## WHEAT! WHEAT! WHEAT!

[Established 1848.]

To the FARMERS and PLANTERS of Maryland and the South generally.

**HORNER'**

## MARYLAND SUPER-PHOSPHATE.

(We court the Chemist's inquiry.)

After 23 years' experience in the Fertilizing business, and after establishing a wide reputation for the purity and excellence of his Bone Dust, the subscriber has been induced to prepare a Phosphate suitable to the requirements and every way worthy the attention of the Southern Farmer.

The "MARYLAND" is a rejuvenator and permanent improver of the soil. It stimulates equal to Peruvian Guano, and sustains equal to Bone, being composed almost entirely of these ingredients, with a very liberal percentage of Potash in the residuum. There is no adulterator nor inferior article used—every part of the Phosphate being of essential benefit to the land. Neither pains nor expense have been spared in its preparation, and we claim for it the greatest benefit to the farmer from the smallest outlay.

For Cotton, Wheat and Corn, and as a general stimulant and aliment for worn and impoverished land, there can be nothing superior. It is warranted to run as high in Ammonia, and higher in Bone Phosphate, than any other fertilizer in the market.

Price \$50 per ton, in new bags. No charge for delivery.

**JOSHUA HORNER, JR.**  
Manufacturer and General Commission Merchant.  
Office and Warehouse, 54 S. Gay St. General Warehouse, Cor. Chew and Stirling Sts., Baltimore, Md.

### BONE DUST \$45,

Bone Meal \$50, Dissolved Bone \$47,

Our own manufacture, in new bags; Eastern and Western Bone Dust, \$35 Peruvian Guano delivered from Peruvian Government Warehouse at the lowest rates. No charge for delivery.

aug-6t

**JOSHUA HORNER, JR.**

## CHOICE FRUIT TREES.

We offer, for the coming Fall, an exceedingly fine and well grown stock, embracing a large assortment of STANDARD & DWARF APPLE, PEAR, PEACH, PLUM, CHERRY, APRICOT, NECTARINES, &c., of the most desirable varieties; also GRAPES and SMALL FRUITS, (in great variety.) ASPARAGUS, RHUBARB, &c. Special attention given to selections for private orchards and Gardens. We also grow a fine assortment of ORNAMENTAL TREES and SHRUBS, EVERGREENS, ROSES, HEDGE PLANTS, &c.

Priced Lists mailed to applicants.

**EDWARD J. EVANS & CO.**

Nurserymen and Seedmen, York, Pa.

sep-3t



THE MARYLAND FARMER.

# GROVER & BAKER'S

HIGHEST PREMIUM



## ELASTIC STITCH FAMILY SEWING MACHINES.

### POINTS OF EXCELLENCE.

Beauty and Elasticity of Stitch.

Perfection and Simplicity of Machinery.

Using both threads directly from the spools.

No fastening of seams by hand, and no waste of thread.

Wide range of application without change of adjustment.

The seam retains its beauty and firmness after washing and ironing.

Besides doing all kinds of work done by other Sewing Machines, these Machines execute the most beautiful and permanent Embroidery and ornamental work.

The Highest Premiums at all the Fairs and Exhibitions of the United States and Europe have been awarded the Grover & Baker Machines, and the work done by them, wherever exhibited in comparison.

**At** The very highest prize, THE CROSS OF THE LEGION OF HONOR, was conferred on the representative of the Grover & Baker Sewing Machines, at the Exposition Universelle, Paris, 1867, thus attesting their great superiority over all other Sewing Machines.

SALESROOMS,

No. 17 North Charles Street,

BALTIMORE, MD.

jan-1y

# PURE FERTILIZERS.

All Fertilizers sold by us are guaranteed pure and as represented, and as most of them are prepared at our own works, and under our own directions, the farmer and planter may rely upon their purity. The market is full of fertilizers, and all highly recommended, but each must in time stand or fall, according to its merit. It is for our interest to protect the interest of the farmer, and realizing this we offer and recommend the following, viz :

## THE ANDREW COE Super-Phosphate & Lime

Manufactured only by E. WHITMAN & SONS,  
From Ground Bone, Peruvian Guano, Sulphuric Acid and Potash.  
IS THE MOST RELIABLE PHOSPHATE IN THE MARKET.  
Price \$52 Per Ton, in Sacks, of 160 pounds each.

## MISSOURI BONE MEAL.

*Its Superior an Impossibility.*

Analysis July 14th, 1871:

Ammonia.....	4.38
Bone Phosphate of Lime.....	49.51

Which is the highest analysis yielded by pure bone. The largest particles are smaller than clover seed.

Price \$45 Per Ton, in Sacks of 160 Pounds each.

NOTICE.—We originated the name "MISSOURI BONE MEAL" for an article for which we are Sole Agents for Maryland and the Southern States. Other dealers have, since our Bone has established such an enviable reputation, advertised and branded their own articles as Missouri Bone, and we give notice to the public that none is the genuine original article unless our name is on every bag. We send our branded bags to the Mills and none comes to this market excepting to ourselves.

## New Jersey Ground Bone.

PRICE \$40 PER TON.

We have sold hundreds of tons of this Bone, and it has invariably given satisfaction. Peruvian Guano, South Carolina Bone (fine ground or dissolved,) Plaster, Sulphuric Acid, and all kinds of Fertilizer materials always on hand and for sale at the lowest market prices.

### E. WHITMAN & SONS,

Dealers in Agricultural Implements and Garden Seeds,

sep-tf

145 & 147 W. PRATT ST., Baltimore, Md.




# The Celebrated Chicago Farm Pumps

Are made with or without a Porcelain Lined Iron Chamber.




FOR CISTERNS & WELLS OF ANY DEPTH  
UP TO 100 FEET.

They are the cheapest and best because  
the simplest and most durable.

 Every Pump warranted.

**Over 100,000 Sold.**

For sale everywhere by Hardware Merchants and dealers in standard Farm Machinery.

 Descriptive Catalogues and Price Lists furnished free upon application.

For terms address the manufacturers,

**J. F. TEMPLE & SONS,**

**Chicago, Ill.**

sep-4t

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**TO CORN GROWERS!**

---

## **J. J. TURNER & CO.'S AMMONIATED Bone Super-Phosphate.**

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ANALYSIS—Ammonia.....	2.83
Soluble Phosphate of Lime.....	29.51
Bone Phosphate of Lime.....	10.67

Composed of the most concentrated materials, it is richer in Ammonia and Soluble Phosphates than any other fertilizer sold, except our "EXCELSIOR," and is made with same care and supervision. Uniform quality guaranteed. Fine and dry, in excellent order for drilling. Packed in bags and barrels. ~~at~~ PRICE \$50 PER TON.

**J. J. TURNER & CO.**

**42 Pratt Street, Baltimore, Md.**

# Pennsylvania Agricultura Works, YORK, PENNSYLVANIA.

A. B. FARQUHAR, Manager and Proprietor.

The Pennsylvania Agricultural Works is one of the most extensive establishments of its kind in the United States. It is furnished with improved Machinery, Foundry, Forging Rooms, Planing and Sawing Mills, Lumber Yard, &c., complete within itself. We are situated among the great Iron, Coal and Lumber fields, which form the basis of all manufacturing; and I would respectfully call the attention of the public to these advantages, confident of meriting an extended patronage.


The following are among my specialities:

## PLOWS.

Polished, Hardened Steel and Cast Iron. Farquhar's Cast Steel Model Plow, one and two horse, warranted in any soil, and under all circumstances, *second to none*—American Clipper, Full Steel, one, two and three horse. Atwood and Ohio Cast Plows, two and three horse. Subsoil Plows, Steel soled, two and three horse. Hillside or Swivel Plows, &c., &c.

Shovel Plows, Cultivators, Sulkie Plows Made of the best White Oak, or Refined Iron Beams, with hardened Steel Shovels, Plain or Reversible.

KEYSTONE CORN PLANTER, with PHOSPHATE ATTACHMENT, works perfectly with any size Corn and any pulverized Fertilizer.

 For further particulars, send for Illustrated Catalogue and Price List.

feb-1y

A. B. FARQUHAR, York, Pa.

## AGRICULTURAL STEELS.

Cultivator Teeth, hardened steel, Shovel Plow Blades, Cotton Scrapers, Improved Dickson Cotton Sweeps, &c., all of best Steel, made expressly for my use.

## Pelton Triple Geared Horse Powers.

This celebrated Horse Power is fast taking precedence wherever introduced; it is more economical, durable and lighter of draft than any other. I make all sizes from two to ten horse.

## THRESHING MACHINES.

Of all sizes, for both Gear and Belt.

RAILWAY HORSE POWERS with SEPARATORS.

## FARQUHAR'S SEPARATOR.

From two to ten Horse Power; simple, strong and durable. Turbine Water Wheels, Mill Gearing, Plow Irons and Castings, &c.

## PLOW HANDLES.

Having improved Blanchard machinery for the manufacture of Plow Handles upon an extensive scale, I can supply first quality Handles, side bent to order for any pattern of plow.

# MORO PHILLIPS'

GENUINE IMPROVED

# SUPER-PHOSPHATE OF LIME.

STANDARD GUARANTEED.

*Reduced in price, and improved in quality by the addition of Potash.* This article is already too well known to require any comments upon its Agricultural value. Ten years experience has fully demonstrated to the agricultural community its lasting qualities on all crops, and the introduction of Potash gives it additional value.

Price \$50 Per Ton, 2000 lbs. Discount to Dealers.

# PURE PERUINE.

Superior to Peruvian Guano. Patented April 29, 1860.

Manufactured by MORO PHILLIPS.

Price \$50 Per Ton---2,000 Pounds. Discount to Dealers.

For sale at Manufacturer's Depots:

{ 110 S. DELAWARE AV., Philadelphia, Pa.  
95 SOUTH STREET, Baltimore, Md.

And by Dealers in general throughout the country. Pamphlets mailed free on application.

MORO PHILLIPS,

Sole Proprietor and Manufacturer.

ap-1y